FOUNDED IN

RAILWAY AGE

THE STANDARD RAILROAD WEEKLY FOR ALMOST A CENTURY

DECEMBER 16, 1950

51

ROAD FREIGHT LOCOMOTIVES FOR THE B&O

FOURTEEN 1600 hp Baldwin-Westinghouse Road Freight Locomotive units have recently been added to the motive power pool of the Baltimore and Ohio Railroad. These new 1951-Model locomotives reflect the improved design that provides higher horsepower and tractive-effort ratings.

BALDWIN-Westinghouse

DIESEL-ELECTRIC LOCOMOTIVES

RAILROADS PREFER TEXACO

More railroad Diesel locomotives in the U. S. are lubricated with TEXACO than with any other brand.

Texaco Diesel lubrication and service are available in all 48 States.

Photo courtesy New York, New Haven and Hartford R.R.

FUEL SAVED—UPKEEP COSTS REDUCED

When you lubricate Diesels with TEXACO DIESELTEX HD

IN MILLIONS of miles of grueling service, *Texaco Dieseltex HD* has proved itself the superior lubricant for Diesel locomotives. It keeps top decks clean . . . assures freedom from harmful carbon, gum and varnish . . . reduces wear . . . and keeps fuel consumption at a minimum.

Texaco Dieseltex HD is produced according to a special, exclusive formula. Its fully detergent-dispersive properties are made even more effective by special heavy-duty additives that greatly increase resistance to oxidation and sludge formation. Thus, you can count on better compression and combustion . . . longer life for engine parts...greater mileage between overhauls.

Texaco Dieseltex HD meets the stringent requirements of leading Diesel locomotive builders...and has the enthusiastic acceptance of operators everywhere. Let a Texaco representative give you full information. Just call the nearest Railway Sales office listed, or write:

The Texas Company, *Railway Sales Division,* 135 East 42nd Street, New York 17, N. Y.

NEW YORK
SAN FRANCISCO
CHICAGO • ST. PAUL
ST. LOUIS • ATLANTA

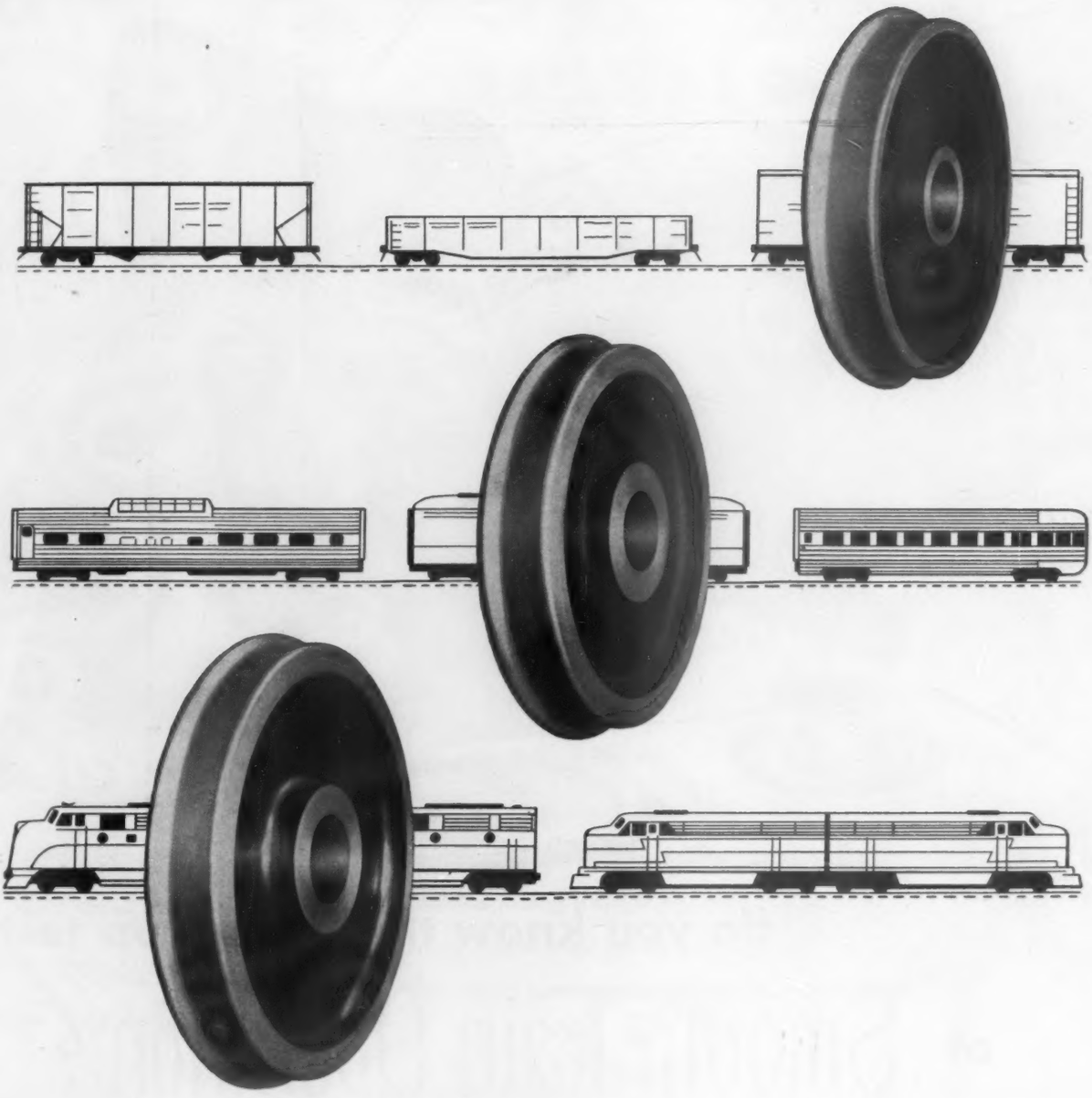
TEXACO

TEXACO Dieseltex HD

FOR ALL RAILROAD DIESELS

TUNE IN . . . TEXACO STAR THEATER starring MILTON BERLE on television every Tuesday night. See newspaper for time and station.

Published weekly by Simmons-Boardman Publishing Corporation, Orange, Conn. Executive Offices, 30 Church Street, New York 7, N. Y. Entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price $6.00 for one year, U. S. and Canada. Single copies, 50 cents each. Vol. 129, No. 25.



Bethlehem wrought-steel wheels are consistently high-mileage products, and their durability is not a matter of chance. It is due to a skillful blending of fine raw materials, expert metallurgy, careful forging, and painstaking attention to details all along the line.

Whether you need untreated freight wheels or heat-treated types for passenger and locomotive service, specify Bethlehem. We know of no easier way to reduce wheel replacements.

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

On the Pacific Coast Bethlehem products are sold by **Bethlehem** Pacific Coast Steel Corporation. *Export Distributor:* Bethlehem Steel Export Corporation

BETHLEHEM STEEL

BETHLEHEM WROUGHT-STEEL WHEELS

COMPANIONS TO BETHLEHEM FORGED-STEEL AXLES

FREIGHT • *PASSENGER* • *DIESEL*

do you know the coffee cup test of Smooth Train Operation?

It's not listed in any engineering text . . . but a full coffee cup sitting in a clean, slopless saucer on a dining car table tells a lot about the smoothness of the ride . . . and the comfort of the passengers. And in this highly competitive day, these things are highly important.

With all the care and skill in the world, it is difficult to handle a modern heavy, high-speed passenger train without some jerking and jolting . . . unless the brake equipment is designed specifically to do the job. Westinghouse HSC Electro-pneumatic brake equipment gives the precise, velvet-smooth control that is needed. Braking impulse is transmitted to every car in the train simultaneously. The Speed Governor Control automatically proportions the brake pressure to the speed. The "AP" Decelostat immediately softens brake pressures if wheel slip impends.

Westinghouse Air Brake Co.

WILMERDING, PA.

Vol. 129, No. 25 December 16, 1950

RAILWAY AGE

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IN THIS ISSUE

EDITORIAL COMMENT

Insurrection in Chicago—Where Will It Break Out Next? 31

Could More Information on Costs Be Profitably Used? 32

The Changing Character of Shop Equipment 33

GENERAL ARTICLES

Combination Sleepers for the Gulf, Mobile & Ohio 34

Investment Bankers Look at the Railroads 38

Mechanical Handling of Bulk Storage Mail 40

Bridges Expedite Freight Between Platforms 44

Electric Motive Power for the Canadian National, by W. A. Bailey 46

DEPARTMENTS

New Books 49

Communications 50

General News 51

Railway Officers 68

Current Publications 76

Revenues and Expenses 80

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CUT COSTS . . . STEP-UP EFFICIENCY

with "UNION" C.T.C.

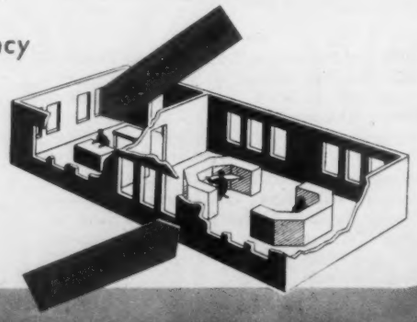
. . . And this applies to multiple, as well as single-track, territories!

IN double track territories, for example, switches can be power-operated with signal control arranged to govern train movements in *both* directions on *both* tracks. Crossovers, under the direct control of the operator, permit trains to pass from one track to the other . . . fast trains can run around slower ones, and both keep moving at normal speeds. When traffic is heavy in one direction, sections of both tracks can be used by trains running in that direction.

With such an arrangement, you can increase your railroad's track capacity . . . eliminate congestion by reducing unnecessary delays, and assure maintenance of fast advertised schedules.

and for maximum efficiency

Concentrate Control at Division Headquarters



UNION SWITCH & SIGNAL COMPANY

SWISSVALE PENNSYLVANIA

NEW YORK CHICAGO ST. LOUIS SAN FRANCISCO

WEEK AT A GLANCE

STRIKE! It's difficult to understand the mental processes of men who would feign sickness with the deliberate intention of fouling up vital railroad traffic at a time when the tragically heroic retreat of our armed forces in Korea is still a matter of front-page news. But those Chicago switchmen, whose "illness" is duly reported in the news pages, apparently don't realize or don't care about the possible results of their irresponsible action. Great responsibility, of course, must rest with their union leaders, who —whatever they may say now about urging the men "to go back to work"—have drummed up repeated demands for apparently unlimited wage increases and have not hesitated to exaggerate the railroad's ability to pay those increases. But, final, ultimate responsibility, for reasons which our leading editorial points out in detail, lies with the politically minded Congress of the United States.

NEW DEAL ON MAIL: As this issue's News pages report, the long-pending mail-pay case has moved another step closer to final settlement, with I.C.C. approval of an agreement between the railroads and the Post Office Department under which the railroads will receive additional payments aggregating about $152 million for having carried the mail during the past four years. Probably, as even the department's own cost studies indicate, that isn't enough, but at least it's a bird in hand. The same agreement—and this could conceivably be its most important feature—contains also important provisions relating to the future mail-pay rate structure, which may put that structure, after January 1, on a more equitable basis than at any time since at least the end of World War II. Further evidence of a possible "new deal" for the railroads in mail transportation is the illustrated feature article, beginning on page 40, describing cooperative railroad-P.O. Department experiments in mechanical handling of bulk storage mail, which have as their ultimate objectives reduction of costs for that necessary service.

AS OTHERS SEE US: Several weeks ago, *Railway Age* published a discussion by an insurance company executive of transportation from the investor's viewpoint. Complementary thereto is the article on pages 38 and 39 of this issue, giving the investment bankers' outlook on railroads.

FASTER FREIGHTHOUSE HANDLING: How the Southern expedited the handling of l.c.l. freight at its station in Atlanta, Ga., by installing four motor-operated steel lift bridges is told in a short illustrated article on pages 44 and 45.

NOTES ON THE NEWS: 126,870 freight cars on order December 1.—Splawn elected I.C.C. chairman for 1951.—Nickel Plate to issue common stock.—Week's car orders include 1,125 for Seaboard Air Line, 1,009 for Illinois Central, and 525 for Central of Georgia; Grand Trunk Western inquires for 500.—Katy orders 11 diesels.

PLAUSIBLE THEORY: The November 22 accident on the Long Island at Kew Gardens, N. Y., "may have been caused when the motorman on the rear train accepted as his own a clear signal displayed for the preceding train, while failing to see, until too late, the rear lights on that train." So, in effect, I.C.C. Commissioner William J. Patterson, who investigated the accident, told the House Committee on Interstate and Foreign Commerce at a special hearing this week; the hearing, and the commissioner's theory, are reported in more detail in the News columns. In those columns, also, is a brief statement by the road's newly appointed trustee, William H. Draper, Jr., on some of the policies he expects to follow.

WHO SAYS THERE'S NO SANTA CLAUS: The bus lines serving New York City—both suburban and long-distance—have certainly found one. Actually, of course, it's the Port of New York Authority, which seems to have a fondness for masquerading in red woolens and white whiskers for all agencies of transportation except the railroads. This time it's a $24-million bus terminal, described as "the biggest and most scientifically designed facility of its kind," which was officially opened at 12.01 A.M., December 15. In justice to the P. N. Y. A., the bus lines will, to be sure, have to pay something for their use of the new terminal. But it is still a pretty handsome Christmas gift—a traffic-attracting facility, publicly financed for private use, in direct competition with the privately financed and heavily taxed railroad terminals in the New York area; a facility, incidentally, which the bus lines have been either unable or unwilling to build for themselves, as the railroads built their terminals.

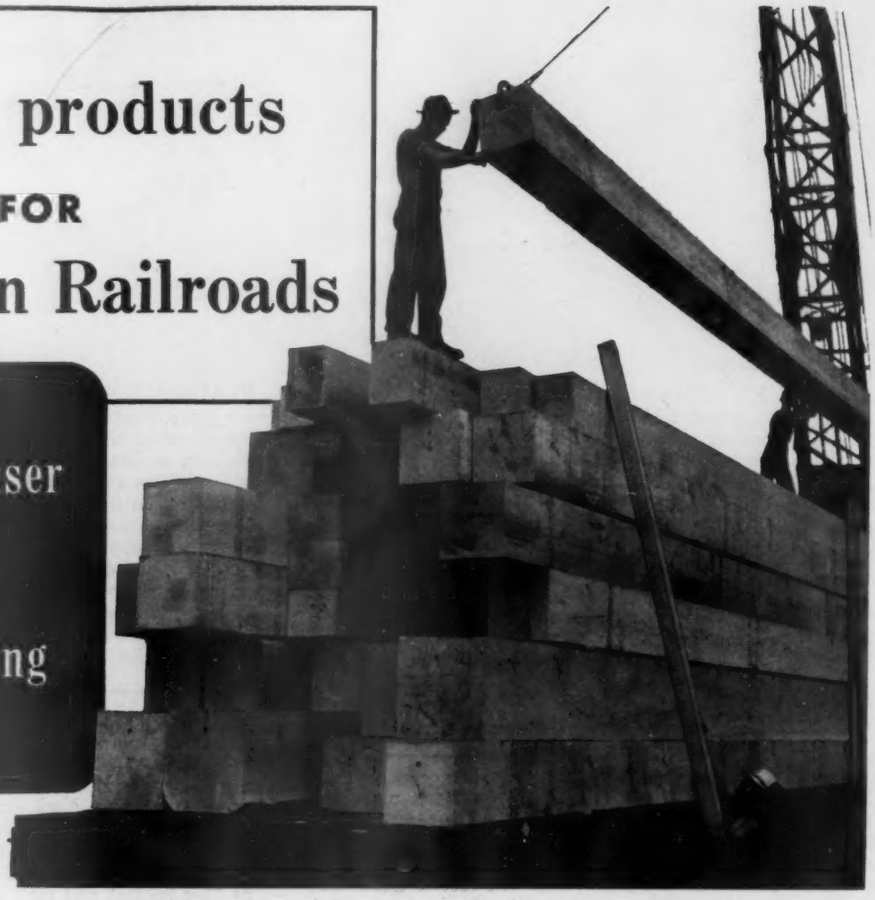
ELECTRICS FOR C. N.: Beginning on page 46, W. A. Bailey, of the General Electric Company, describes three new electric locomotives delivered last summer to the Canadian National for use on its electrified Montreal suburban lines. An unusual feature of this electrified operation —and one definitely advantageous from the maintenance standpoint—is that the same traction motors are used on all equipment.

COST ANALYSIS: "Can anyone doubt that continuing an intensive analysis . . . of revenue derived from transportation of specific movements of specific commodities, in relation to handling costs, would be highly informative and, most likely, highly profitable?" That question, and some aspects of the answer to it, are the subject of editorial comment herein.

NEW SLEEPERS: Four new sleeping cars, offering a wide variety of accommodations, built for the Gulf, Mobile & Ohio by the American Car & Foundry Co. are described, but with a minimum of words and a lot of pictures, beginning on page 34.

Forest products FOR American Railroads

FROM Weyerhaeuser Mills AND Distributing Yards



WITH an ever-increasing percentage of timbers and lumber produced from the woods of the Pacific Northwest and the Inland Empire being used by American railroads, the service facilities of Weyerhaeuser become increasingly important.

In addition to direct shipments of timbers, car and building materials from eleven large western mill operations, Weyerhaeuser maintains seven wholesale distributing yards which are serving the Atlantic Seaboard, the Midwest and the Pacific Coast. Mills and distributing yards, under normal conditions, carry complete lumber stocks. Fabricating facilities are located at strategic points.

Weyerhaeuser Sales Company

NEWARK, NEW JERSEY • SAINT PAUL, MINNESOTA • TACOMA, WASHINGTON

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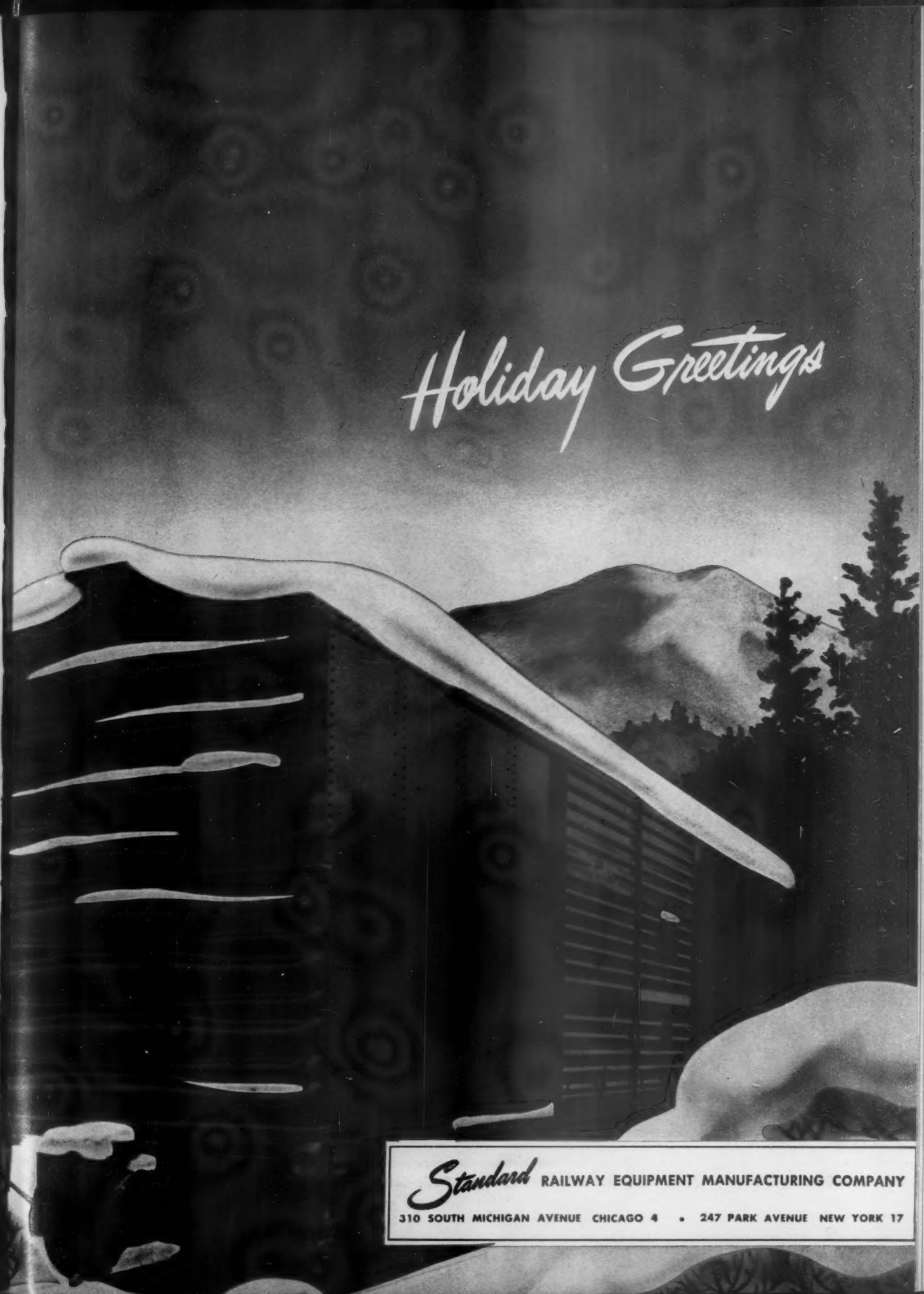
PHILADELPHIA, PA.—Westmoreland Street and Delaware River • PORTSMOUTH, R. I.—Weyerhaeuser Road
SAINT PAUL, MINN.—2563 Franklin Avenue • LOS ANGELES, CALIF.—3557 South Hill Street



Standard RAILWAY EQUIPMENT MANUFACTURING COMPANY
310 SOUTH MICHIGAN AVENUE CHICAGO 4 • 247 PARK AVENUE NEW YORK 17

It's a proved fact...

ALLOY STEELS CUT OVERHEAD

Basic service cost—not original cost—is the true yardstick by which to measure any material. That's how tough, strong alloy steels have proved over the years that they actually save money in many engine and car applications.

Affording uniform response to heat treatment, these steels produce the hard, wear-resisting surfaces needed for Diesel crankshafts, cylinder liners and wheel bearings. Their unsurpassed resistance to fatigue, impact and extreme temperature makes them ideally suited for connecting rods, pistons and other moving part applications.

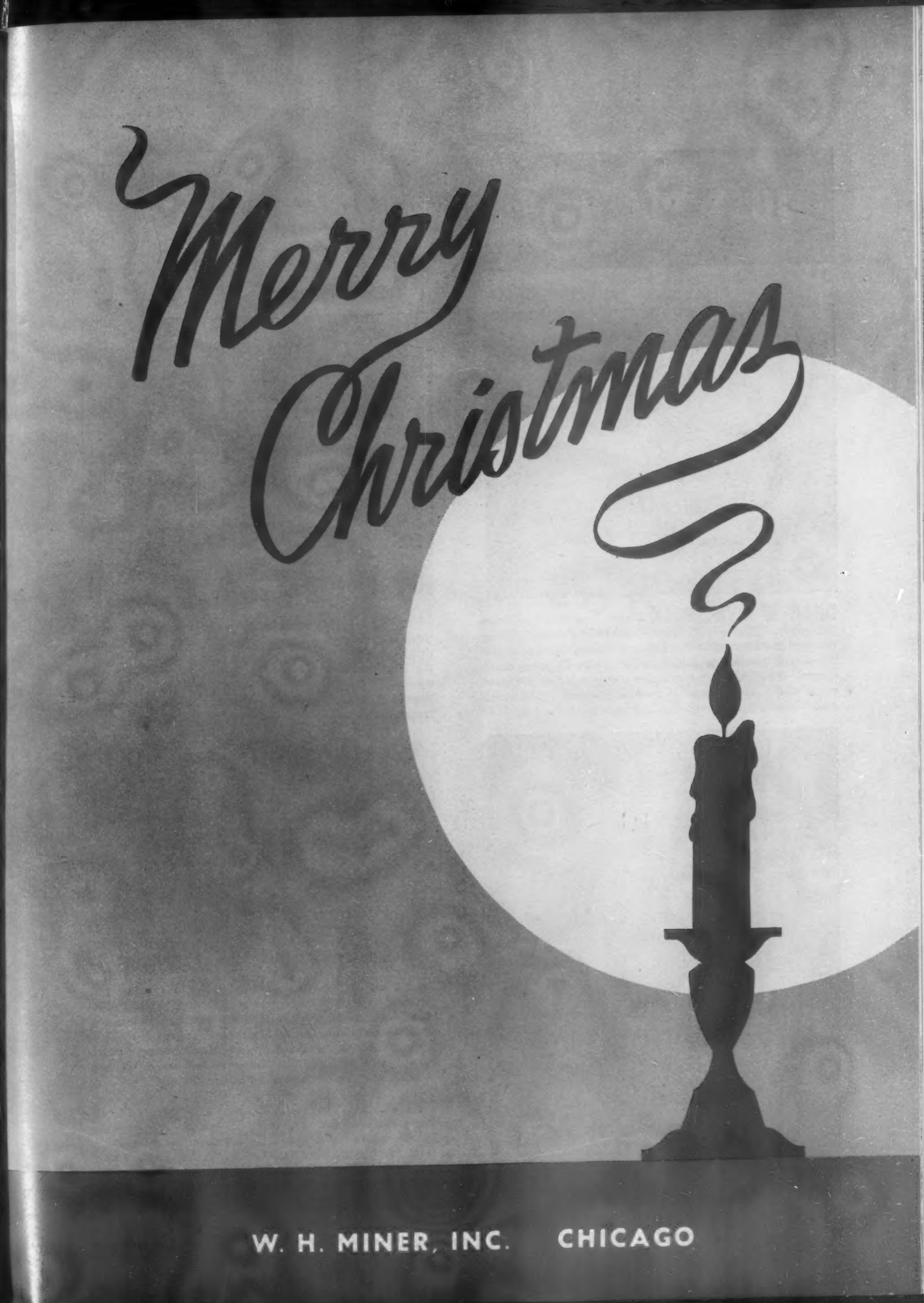
Yes, alloy steels cost less because they last longer—and do so without danger of costly, life-endangering breakdowns.

Republic—world's largest producer of alloy and stainless steels—offers you prompt, competent assistance in determining where these versatile steels can effect the greatest savings for you. Write, wire or phone *today.*

REPUBLIC STEEL CORPORATION
Alloy Steel Division • Massillon, Ohio
GENERAL OFFICES • CLEVELAND 1, OHIO
Export Department: Chrysler Building, New York 17, N.Y.

Republic REPUBLIC STEEL ALLOY STEELS

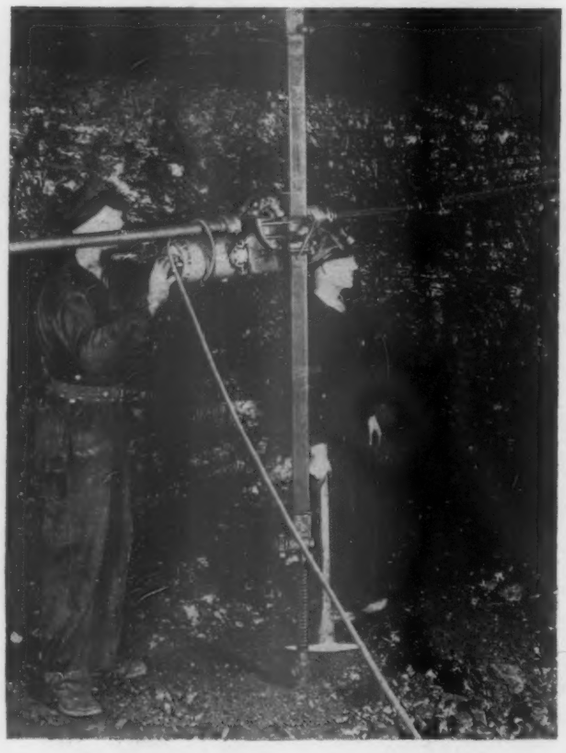
Other Republic Products include Stainless, High Strength and Carbon Steels—Sheets—Plates—Pipe—Bolts, Nuts and Rivets—Boiler Tubes


Merry Christmas
W. H. MINER, INC. CHICAGO

JUST PLAIN TOUGH

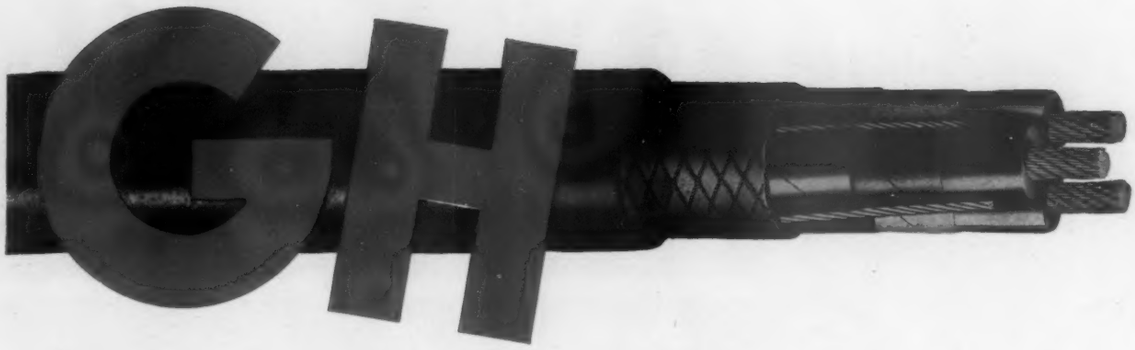
DRAG IT OVER ROCK Many Amerclad Cables are built especially for service like this, and they're a wonderful investment in safety and trouble-free operation. Cables can be furnished with that famous American Steel & Wire Company development—PS Shielding, a conducting rubber tape that eliminates many of the disadvantages of metallic shielding . . . prevents corona discharge . . . provides a fool-proof ground circuit.

SUBMERGE IT Pit mining often means that Amerclad must be submerged in standing pools of water *besides* being dragged over sharp rock. The tough Amerprene jacket is just the thing for duty like this: it's practically impervious to moisture, earth acids and alkalies. PS Shielding gives extra protection—it clings tightly to the insulation and eliminates the gaps that cause corona discharge.



USE IT ON THE RAILROAD . . . Amerclad Railway Utility Cable does not need a canvas stocking. The flexible compound-strand-conductor is made from well-tinned and annealed copper wires—covered with a separator of paper or cotton for easy stripping. Oil-resistant Amerprene jacket means extra years of service—for generator leads, car-lighting service, train line connectors and battery jumpers.

. . . . . AND IN MINES Amerclad Cables and Cords are available for just about every mining need . . . from sweat-proof miners' lamp cord to locomotive gathering cable. Jackets are made from flame-resisting Amerprene—a tough, hard-wearing Neoprene compound that will best withstand mine acid water. We furnish cables that conform to all specifications of the Pennsylvania Department of Mines.



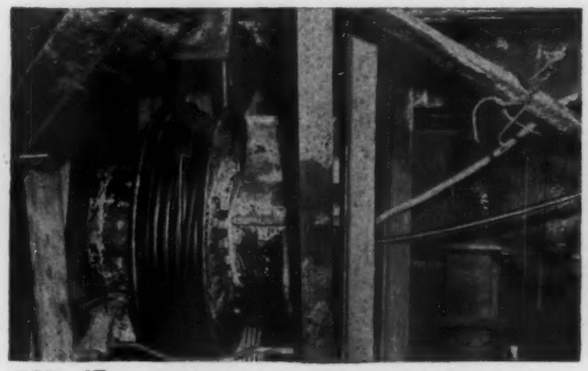
...these Amerclad Cables are Built for Punishment

When you buy Amerclad Cable, you can *pinpoint* your needs. Chances are we can pick a standard cable, right from stock, that will fit your requirements exactly.

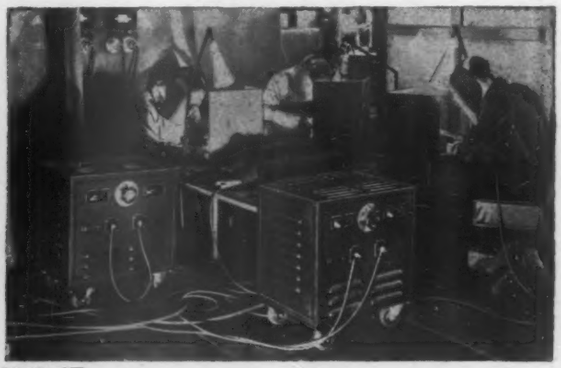
For some examples, look at the photographs on these pages. They show some mighty strenuous applications for any type of cable. But each problem was solved with Amerclad—the famous group of rubber jacketed cables manufactured by American Steel and Wire Company.

Standard insulations and jackets are available to withstand heat, oil, flame, sunlight, age and underground mining service. Moreover, you can obtain the widest range of physical construction—to meet the special conditions of industrial, general, mining and railway installations. Write today for detailed specifications.

AMERICAN STEEL & WIRE COMPANY, GENERAL OFFICES: CLEVELAND, OHIO
COLUMBIA STEEL COMPANY, SAN FRANCISCO
TENNESSEE COAL, IRON & RAILROAD COMPANY, BIRMINGHAM, SOUTHERN DISTRIBUTORS
UNITED STATES STEEL EXPORT COMPANY, NEW YORK



COIL IT The gathering reel in this picture operates continually—24 hours a day. Used in an automatic parking garage, this Amerclad Cable is constantly being coiled and uncoiled. Upstairs, it is dragged through oil and dirt that would ruin all but the very best cables. Service like this is not unusual for Amerclad Cables—they're built to withstand the worst type of mechanical abuse.



FLEX IT Amerclad Welding Cable has to meet some very special requirements. Made from a large number of very fine wires, the cable lies flat, it doesn't kink or snarl and it doesn't strain the operator's wrists while holding the electrode in an awkward position. Like other Amerclad Cables, Amerclad Welding Cable is vulcanized under pressure in a rigid lead sheath. This insures a perfectly smooth surface that resists abrasion and hard usage.

USS

AMERCLAD CABLES

UNITED STATES STEEL

1951

For *NEW* efficiency, speed, economy . . .

the *NEW* Pullman-Standard Power Ballast Cleaner

Mark this as one of the *longest* forward strides ever taken in the field of mechanized track maintenance. Here is a new, improved power ballast cleaner, built to handle the *toughest* jobs with an ease and certainty hitherto unknown.

This 1951 Pullman-Standard model picks up both the shoulder and the crib ballast (where the track has been cribbed in advance), from *either or both sides of the track at once*—then screens and cleans the ballast and returns it to the track, distributed as desired, *without fouling adjacent track.*

Self-contained and self-propelled, this rugged machine has a production rate of from *800 to 1000 track feet per hour.** Unique design features—such as the new "*Giant-Paw*" propulsion—make possible this exceptional production rate . . . and lead straight to outstanding operating economies.

Orders for the new Pullman-Standard Ballast Cleaner are being taken *now* for first-come, first-served delivery. These may be placed in any one of four ways: (1) outright purchase; (2) rental for 6 months, with option to buy; (3) straight rental for a minimum period of 6 months; and (4) deferred quarterly payments over a period of from 1 to 3 years. Rentals and deferred payments are established at *substantially less than the realizable savings accruing during the payment periods.*

The Pullman-Standard Power Ballast Cleaner is something to investigate *now* . . . to clear the track for drastically reduced maintenance costs in 1951.

POWER BALLASTER PRODUCTS DIVISION

Pullman-Standard

CAR MANUFACTURING COMPANY

79 East Adams Street, Chicago 3, Illinois

BIRMINGHAM 3, 1004 First National Building • CLEVELAND 15, 907 Midland Building
NEW YORK 17, 52 Vanderbilt Avenue • PITTSBURGH 19, 1115 Gulf Building
WASHINGTON 6, D. C., 1025 Connecticut Ave., N.W.
SAN FRANCISCO 4, 2910 Russ Building

CANADA: The Holden Co., Ltd. • Montreal 3, 614 St. James St. W.
Toronto, 128 Simcoe St. • Winnipeg, 150 Princess St. • Vancouver, 769 Powell St.

SEE THE BALLAST CLEANER WORKING!

The new Pullman-Standard Power Ballast Cleaner is now in service on several railroads and is available for inspection under actual operating conditions. Also, a motion picture showing the machine at work will be loaned for exhibition to interested railroads.

**In normal hard-cemented fouled ballast and under normal rail conditions.*

"*Giant-Pau*
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WORKING!

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MODEL

This Action View of the new Pullman-Standard Power Ballast Cleaner shows cleaned ballast being returned to track and shoulders, while the conveyor (adjustable over a range of 180 degrees) deposits dirt where convenient or useful. The cleaner is self-propelled, moving to and from location at speeds up to 25 m.p.h. Power-operated lateral set-off mechanism is built in.

"Giant-Paw" Propulsion—basically new in the industry—eliminates the need for work-train or winch-drive propulsion. Four toggle-driven "Giant Paws" grip the rails and force the cutters steadily forward. "Giant Paws" automatically skip rail-head bonds.

Triple-Action Cutting Mechanism cuts through the hardest cemented ballast, and triple-deck screening cleans the ballast thoroughly, with minimum loss of small aggregate.

Clean as a Whistle is this track after the Pullman-Standard Power Ballast Cleaner has done its work.

Rock Island

Mr. C. O. Ellis, Rock Island's Superintendent of Communications, contacts stations over 1,400 miles away from his Chicago office, through a P-A-X system of five switchboards, interconnected over the Railroad's own lines.

P-A-X business telephone systems are "workin' on the railroads"

—and we mean *working!* On the Rock Island, for example, over 300 P-A-X telephones handle approximately 5,000 calls daily—each call a completed two-way message, with no chance for misunderstanding or insufficient information. Calls are made *quickly*—with the P-A-X dial. Think of the time and money that saves, compared with any other means of communication!

P-A-X is an automatic telephone system, using the railroad's own lines, with P-A-X switchboards and telephones located wherever they're needed for lightning-fast communication to other points on the system. Because it is automatic, P-A-X works at any hour of the day or night. Railroad-owned, it eliminates telephone tolls, throughout the system.

The Rock Island is an outstanding example, but only one, of the many railroads that use P-A-X daily—and have for many years! Get the facts NOW; learn what P-A-X can do for you. Address Automatic Electric Sales Corporation, 1033 W. Van Buren St., Chicago 7, Ill. *In Canada:* Automatic Electric (Canada) Ltd., Toronto.

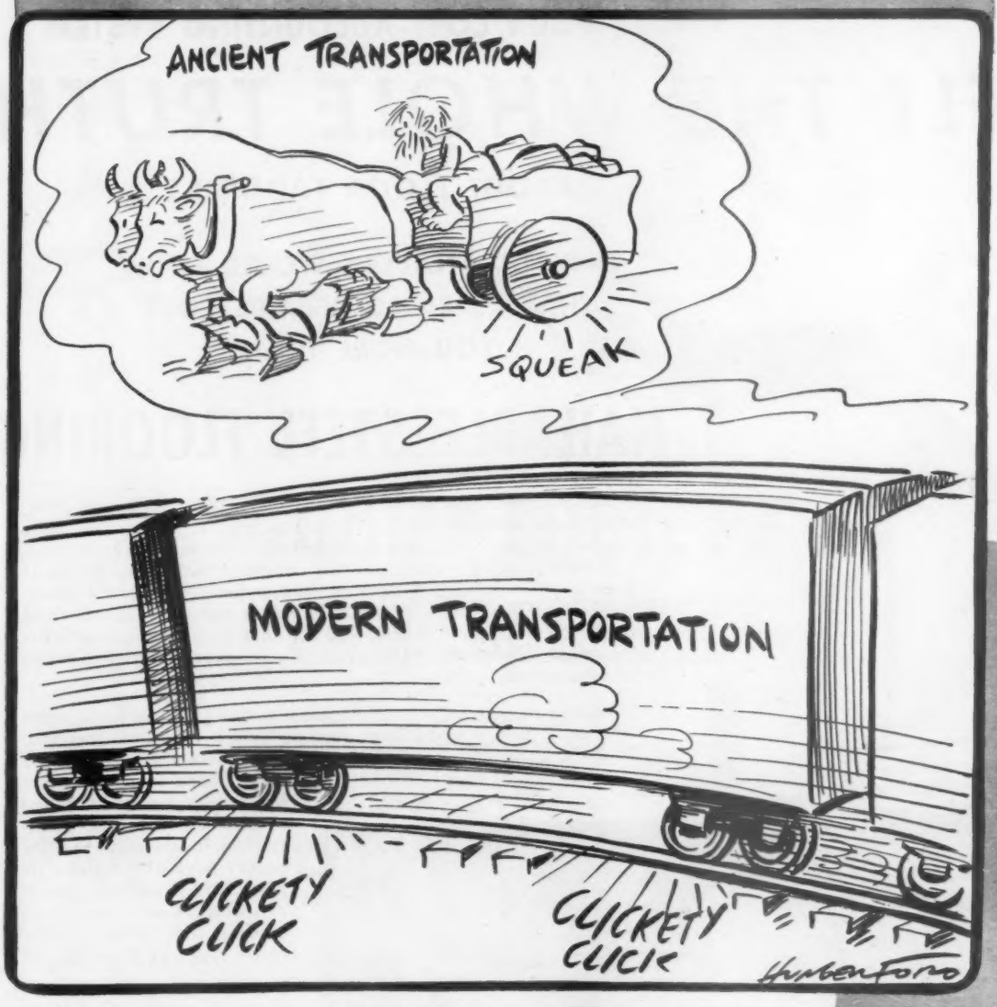
P-A-X business telephone systems

AUTOMATIC ELECTRIC

P-A-X's are serving these roads

Illinois Central
Louisville & Nashville
Atlantic Coast Line
Chicago & Northwestern
Sante Fe
Baltimore & Ohio
Great Northern
Kansas City Southern
Michigan Central
Missouri Pacific
Norfolk & Western
Pennsylvania
Reading
Union Pacific
Southern Pacific
—and many others!

The Wheel—Man's Greatest Invention —By Hungerford

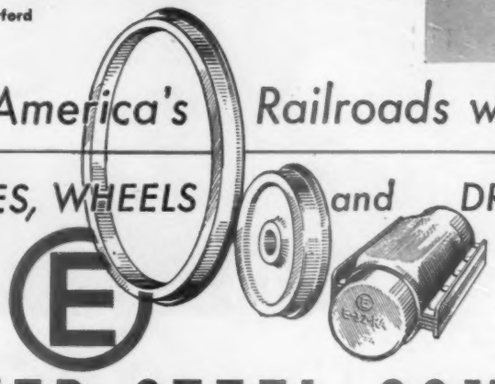


We will be glad to send you enlarged copies of this Hungerford cartoon (without advertising copy) for posting on your office and shop bulletin boards, or a cut for your company magazine, at cost.

Watch for other railroad cartoons by Mr. Hungerford

Serving America's Railroads with

ROLLED STEEL TIRES, WHEELS and DRAFT GEARS



EDGEWATER STEEL COMPANY

P. O. BOX 478 · PITTSBURGH 30, PA.

DOES YOUR COST-ACCOUNTING SYSTEM

TELL THE WHOLE TRUTH

ABOUT FLOOR FAILURES?

CAREFUL ANALYSIS WOULD SHOW
THAT REPEATED REPAIRS COST
YOU *MORE* THAN

NAILABLE STEEL FLOORING

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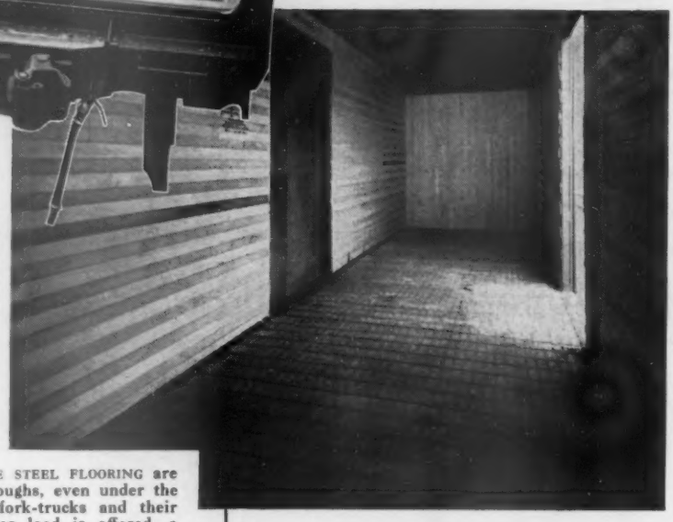

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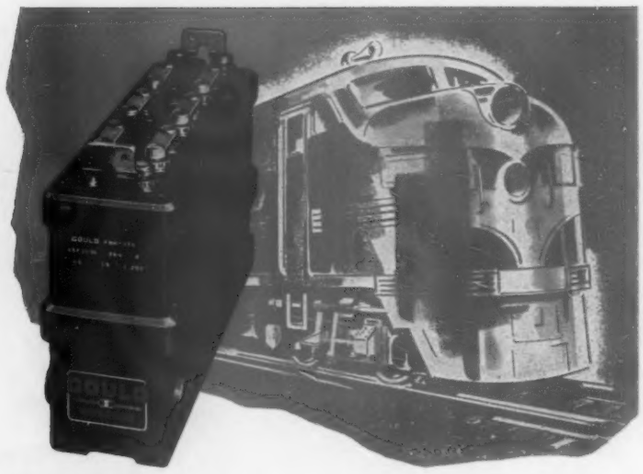

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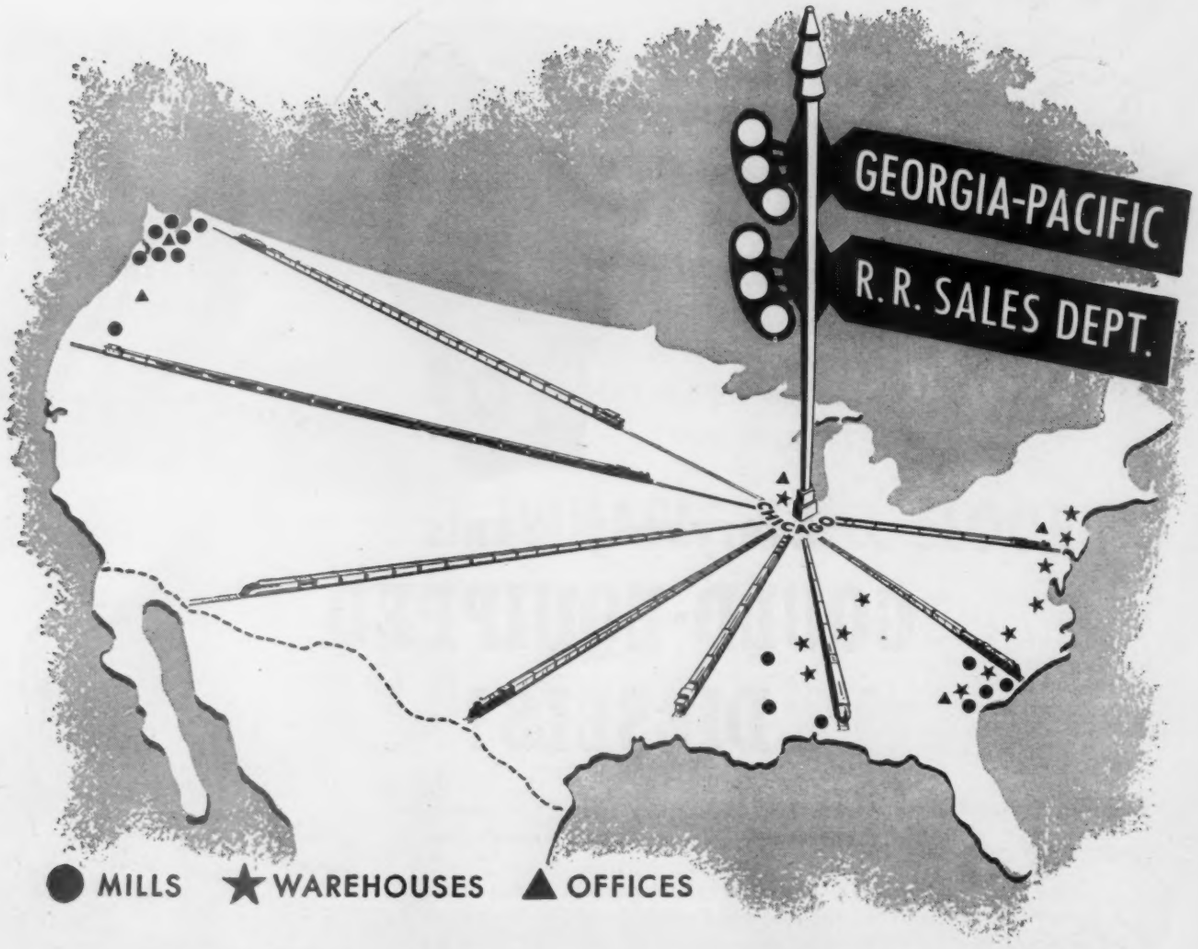

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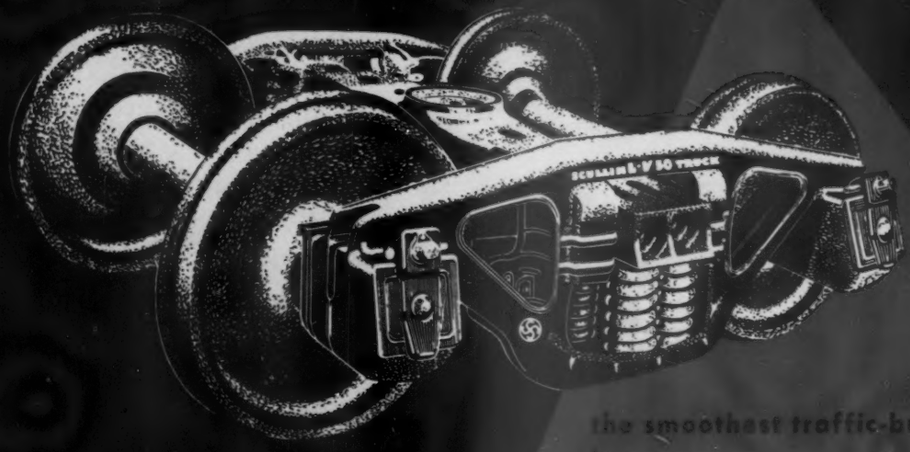

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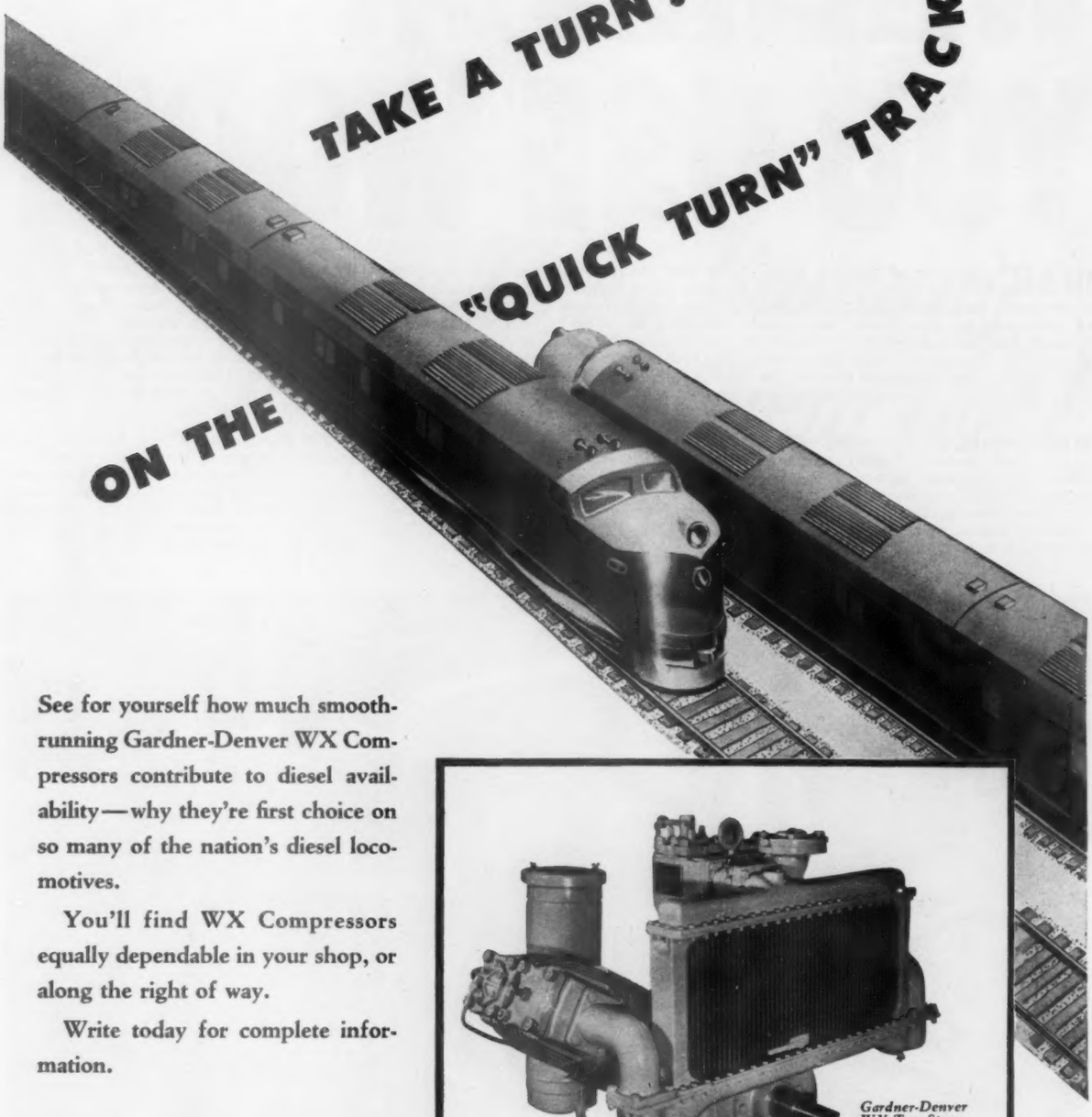

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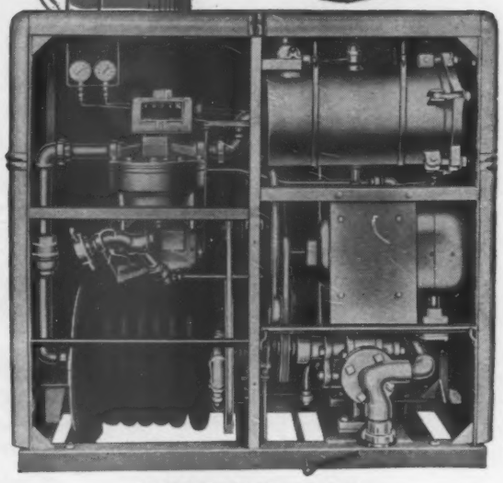

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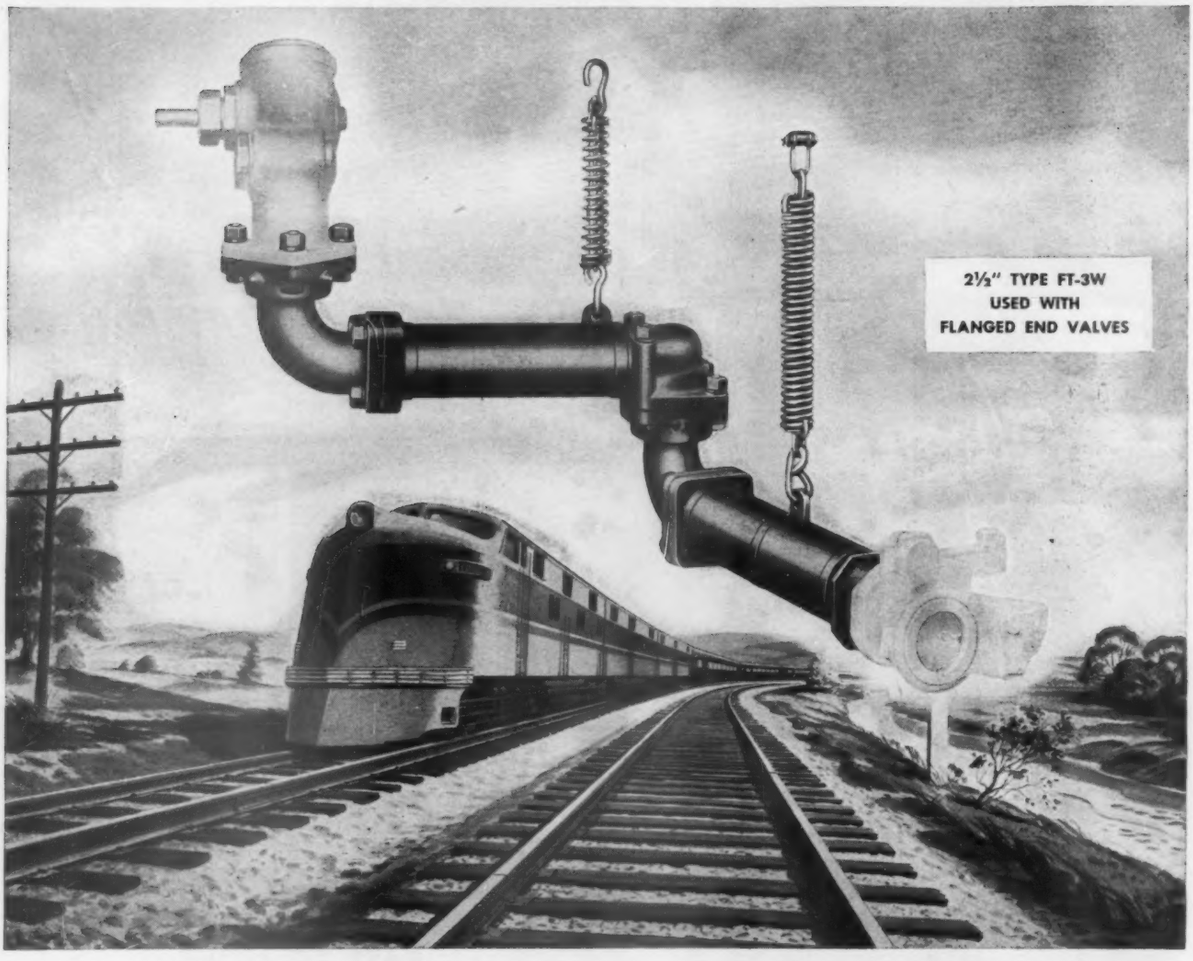

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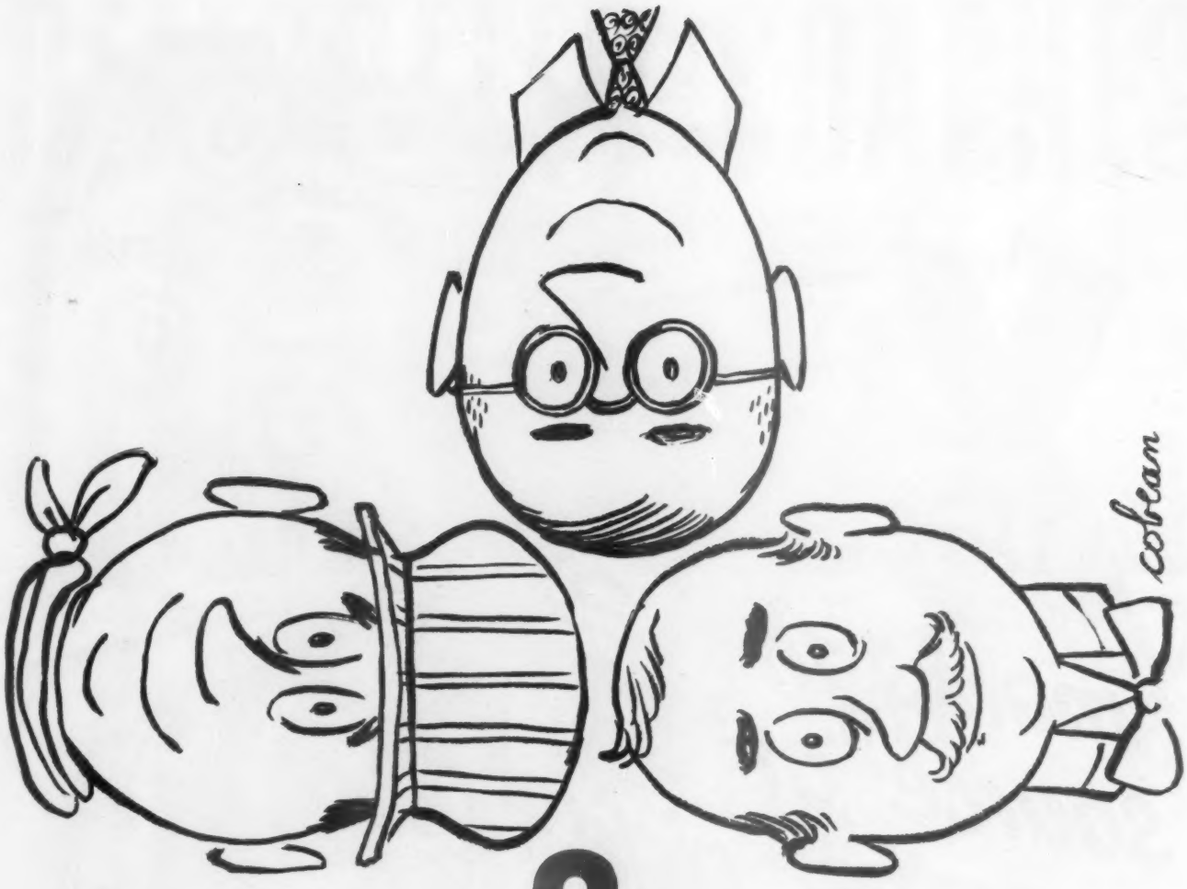

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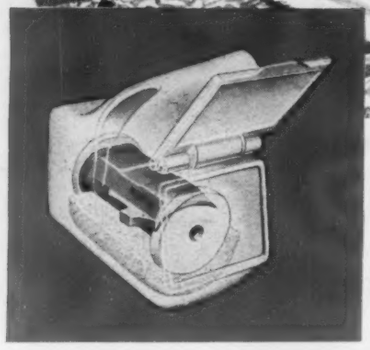

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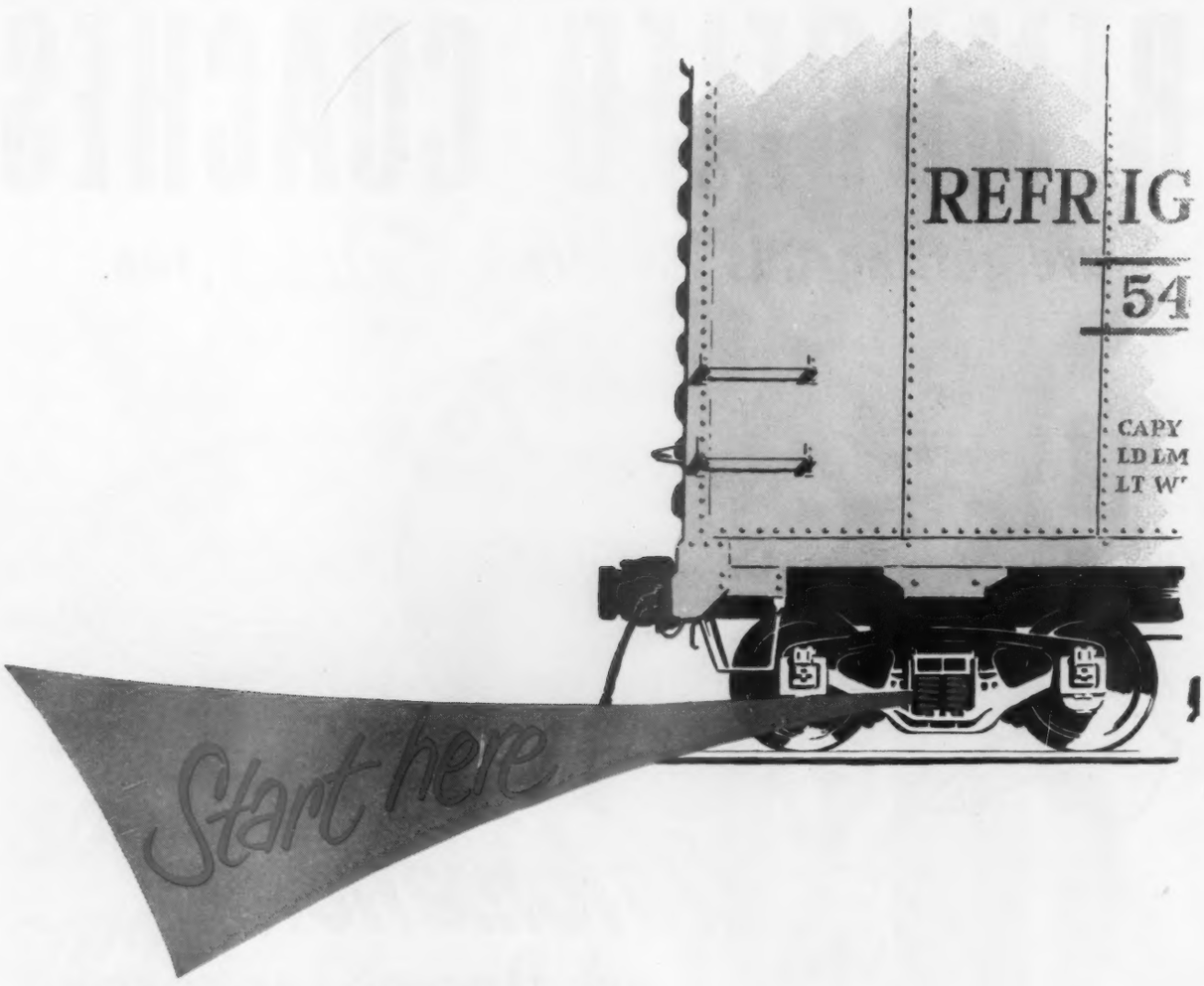

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INSURRECTION IN CHICAGO — WHERE WILL IT BREAK OUT NEXT?

Before what has been called "World War Two Point Five" becomes World War III, there ought to be reached a clear-cut decision as to whether national affairs are being run by the federal government in Washington or by the railway unions. If these unions continue much longer to show that their will rather than the policies lawfully adopted by the duly constituted officers of the federal government are the supreme law of the land, then maybe these unions should be given the responsibility for fighting the war in Korea and providing otherwise for the national defense in what is perhaps the country's time of greatest peril since the war between the states.

Railroad Strike Intolerable

A railroad strike at a time like this is simply intolerable from the standpoint of national safety—yet switchmen members of the Brotherhood of Railroad Trainmen in the all-important Chicago area are out on strike at the time this issue of *Railway Age* goes to press. This strike is directed at the majesty of the government of the United States of America, because the railroads are being operated under the aegis of the federal department of national defense while negotiations over wages and working conditions are going on between the unions and the managements of the companies, assisted by federal mediation under the auspices of the office of the President of the United States.

The use of coercive power of a minority of citizens against the legal actions of the state itself is an act of rebellion. The very existence of government is threatened when rebellion is not firmly put down and condign punishment administered to those who engage in it. At the time of writing, an injunction has been issued by a federal court, calling upon the officers of the union whose members have walked off the job to order the strikers back to work. Maybe the injunction will be obeyed and maybe it will not. In any event, if recent past history is any criterion, in due course the strikers will be coaxed to go back to work—perhaps after receipt of ransom

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money—but no one who fomented or engaged in the rebellion will be in any way punished; and, in a few weeks or months, a similar and perhaps more widespread insurrection will break out somewhere else.

Why Mr. Stalin should put himself to the expense of making atom bombs with the purpose of dropping them on this country—when American unions so obligingly serve his purpose of knocking out American industry, possibly without even being prompted by him to do so—just shows that Mr. Stalin is perhaps not as smart as he is reputed to be.

The American railroads were practically a strike-free industry—while at the same time having the highest wages and best working conditions of any large industry—until the federal government undertook the detailed regulation of railroad labor relations. Until such regulation was instituted, railroad managements fought strikes and often won them; and when strikes were lost, the strikers lost their jobs and their "seniority." Strikes were dangerous then and unions did not resort to them without intolerable provocation. Now, managements' power to fight strikes—to employ men to replace strikers—has, as a practical matter, been taken away from them. No striker risks anything by striking. By not striking he risks being beaten up. If he stays away from his job long enough to qualify for unemployment insurance, he gets paid for striking—out of funds provided by the railroads. It is no wonder that the railroads have become the most strike-ridden industry in the country.

Individuals Not Blamed

This paper does not blame the individual employees who walked out in this or any other railroad strike. The social pressure put upon the member of a craft who elects to work when most of his fellows are walking off the job is most intolerable. Even the politically minded union leaders who are involved in these strikes are perhaps not primarily responsible for them—although, if they possessed any qualities of statesmanship, they could usually prevent them. The real author of this anarchy is the Congress of the United States. It is Congress that enacted the laws which have induced the disgraceful and dangerous situation in railway labor relations which now confronts the nation.

If Congress were to enact laws which paid bounties to cut purses instead of penalizing them and a large increase in thievery should then occur, would it be sensible to denounce the thieves and ignore the agency which provided the incentive for their activity? It is a sad and stupid thing that railroad men should walk off their jobs when their sons and brothers are dying in combat. But it has never yet happened in human history that rewarding or condoning anti-social conduct proved to be an incentive to civic virtue. The railroad men are acting as they have been acting because such behavior is induced and rewarded by the Railway Labor Act. It is an invitation to national disaster to allow that law to remain any longer on the statute books.

COULD MORE INFORMATION ON COSTS BE PROFITABLY USED?

Can anyone doubt that continuing and intensive analysis by the railroads—individually and collectively—of revenue derived from the transportation of specific movements of specific commodities, in relation to handling costs, would be highly informative and, most likely, highly profitable as well?

Some individual railroads, to be sure, do carry on such revenue and cost studies, at least to a limited degree—and put the information to profitable use as a guide to what traffic should be solicited and what can be allowed to drift away with no loss of net revenue. Moreover, the railroads as a whole had available a few years ago a comprehensive nation-wide study along these lines, prepared under the auspices of the Railroad Committee for Study of Transportation, but that analysis is doubtless out-of-date by now.

Like atomic energy, specific commodity cost and revenue studies are (1) expensive, (2) potentially dangerous, and (3) potentially of great economic value—as a guide and incentive to reductions in operating expenses and in increasing the tonnage of remunerative traffic. Probably, if the advantages under item (3) were considered to be sufficiently large and attractive, it might be worth the effort necessary to surmount the disadvantages noted in items (1) and (2). Perhaps it would repay the effort to scrutinize these possible advantages somewhat more closely—

The usefulness of knowing what kinds of traffic contribute to net revenue and those that do not—as a guide in formulating effective policies for traffic solicitation and industrial development—is obvious enough. But have the possibilities of acceptable cost and revenue figures as an unanswerable argument for more realistic rate regulation been fully explored? Railroad rates have to avoid "discrimination" where circumstances and conditions are equal—but substantial differences in handling costs are usually recognized as a justification for rate differences. Variation in rates as between different commodities—because of variations in value and in handling costs—is recognized as justifiable. Similarly, variations in rates on the same commodities as between territories are accepted—where the circumstances under which a particular commodity is handled differ from territory to territory. Why then should not differences in handling costs within a territory or even on different lines of the same railroad be given recognition in the rate structure? Rate differences which would be prohibited under Section 4 of the Interstate Commerce Act, and perhaps also under Section 3, might be shown, if acceptable cost analyses were available, to be quite as justifiable as present rate differences on different commodities.

This paper is fully aware of the shortcomings of cost figures which are based on allocations of joint costs—such figures are inconclusive as to *actual* costs. Never-

theless, if they are compiled in a uniform manner, they may serve a useful purpose for road-to-road comparisons and for comparing trends on the same road from one year to the next. The danger in them lies in their being taken as an accurate reflection of real costs—and hence the possibility that they might be used in rate cases as an argument for reducing rates on noncompetitive traffic.

This danger has already arisen in the use by the Interstate Commerce Commission of its own cost-finding evidence in rate cases; and the greater use by the railroads of their own cost calculations, compiled in accordance with the same formula, might be a valuable defensive weapon, or perhaps even one of offense. The Bureau of Accounts and Cost Finding of the I.C.C. has recently issued an interesting document entitled "Distribution of the Rail Revenue Contribution by Commodity Groups, 1948" which certainly suggests that *on the average* there are a lot of commodities which are getting pretty much of a free ride at the railroads' expense. At the same time, there would appear to be a lot of "fat" in some of the rates, which would permit truck-competitive concessions to be made in the interest of larger net revenues at lower unit charges.

Such cost studies on a nation-wide or territorial basis are, of course, an unsound criterion of the profitability or lack thereof of any particular rate on any particular railroad—and, hence, are inconclusive from a practical standpoint. But similar cost studies made by individual roads ought to reveal some useful policy-making information.

At any rate, that is the conclusion of some down-to-earth and highly respected transportation people. And those accounting department people who are familiar with recent developments in mechanized and electronic methods of computation are not alarmed at the cost aspect of any amount of figure work which promises to lead the way to perceptible increases in remunerative traffic.

WHEN THE PUBLIC DESERTS THE RAILS

"In former times the railroad was the chief means of transportation. The horse and buggy provided little if any competition. The traveling public depended almost entirely upon train service. The conditions which required the railroads to perform these services exclusively no longer exist.

"It is argued that better train service would provide more users of railroad facilities. The record does not support any such conclusion. We know of no rule that requires a railroad to maintain the operation of trains at great loss where the need for the service no longer exists. To require such operation constitutes one of the forms of economic waste which the commission was created to eliminate. The need for service having disappeared, an order of the commission denying its discontinuance is arbitrary and unreasonable."—*From a recent decision by the Supreme Court of Nebraska in the application of the Chicago, Burlington & Quincy to discontinue certain unprofitable passenger trains which the state railroad commission had denied.*

THE CHANGING CHARACTER OF SHOP EQUIPMENT

During the past few years, while the diesel-electric locomotive has been replacing the steam locomotive, that evolution has had a parallel in the facilities with which motive power is serviced and maintained. The job of overhauling a steam locomotive was, and still is, one of tearing the machine down, repairing old or manufacturing new parts, and then reassembling it. The job on a diesel is almost entirely one of replacement, using parts supplied by outside manufacturers. It is not difficult, therefore, to see why the facilities required for the two types of motive power offer such a contrast.

The heavy machinery that has characterized the railroad shops of the past has given way, for the most part, to lighter, more expensive precision machinery designed primarily for inspecting, cleaning, testing and checking the thousands of mechanical and electrical parts that function together in the diesel-electric units. Today as we look over the list of shop equipment purchased by the average railroad, operating from a dozen to several hundred diesel units, the once familiar items—the heavy millers, driving-wheel machinery, large boring mills, boiler-shop machinery, planers, and heavy forging machinery—are being replaced by new names. New manufacturers are entering the picture with equipment such as air filter-oiler-washer, "lube-oil" heaters and circulators, chemical parts cleaning equipment, magnetic and electronic testing and inspection equipment, battery charging equipment, loading resistors for testing power-plant performance, dynamic balancing machines, vapor degreasers, vacuum impregnators, distillation units, banding lathes and any number of new pieces of shop and terminal equipment.

Prominent in the lists of shop equipment are a variety of new wheel and axle machines, indicative not only of the greatly accelerated demand for wheels and axles but of the previously unheard-of precision of machining that is required of these parts for operation at the high speeds prevalent in both passenger and freight service today.

It is interesting to see that the demand for maximum availability of diesel-electric units for revenue service has caused shop engineers to recognize the absolute necessity of installing every facility that will contribute to the elimination of man-hours and greatly shortened shopping periods. This has brought in material- and parts-handling equipment of all kinds.

The character of shop equipment has definitely changed, but it has not crystallized. In this transition period the millions that are spent are indicative merely of the effort to keep relatively new power going. The nature of the future shop job, when the units are greater in number and require more expensive rebuilding work, may be such as to bring back into the railroad shop many of the heavy production machines formerly used for steam-locomotive repairs and now being used to build the new type of power.

1 One of four G. M. & O. sleeping cars. Each combines one compartment, three bedrooms, eight roomettes, and four sections. The car names are "Samuel King Tigrett," "Culver White," "Timothy B. Blackstone," and "Judge Milton Brown." Exteriors are gray and red, with letters and striping in gold leaf. Length is 85 ft.

Combination Sleepers for the Gulf, Mobile & Ohio

Four cars with four types of accommodations were delivered last summer by the American Car & Foundry Co.—Weight, 150,250 lb.—Named in tribute to leaders in the development of the G.M. & O. and Alton

2 Each upper berth has its own individual steps

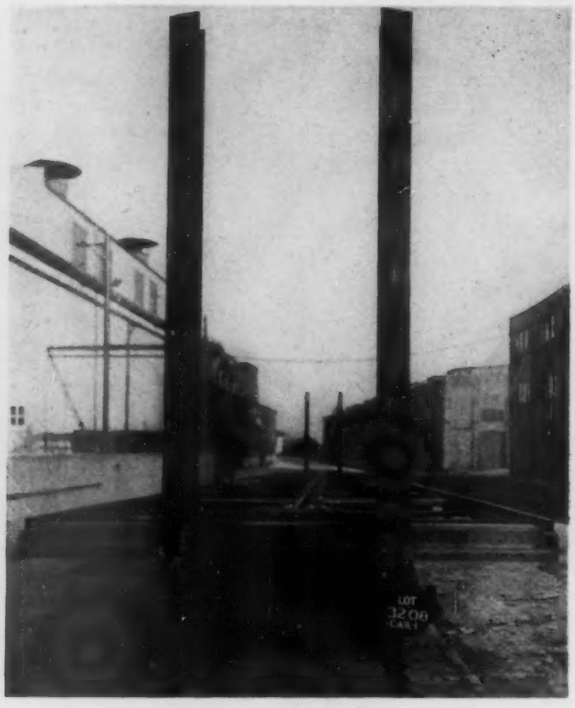
3 Each of the four sections has Anemostat air distributors in the permanent dividing headboards. There are separate outlets for upper and lower berths. Lighting combines fluorescent and incandescent lamps in Luminator fixtures. The windows are Adlake breather type

4 A roomette with the bed down

6 The compartment has a toilet room and closet space. Each room has individual air conditioning and Vapor zone-heat controls. The colors used throughout the interiors are tan and green

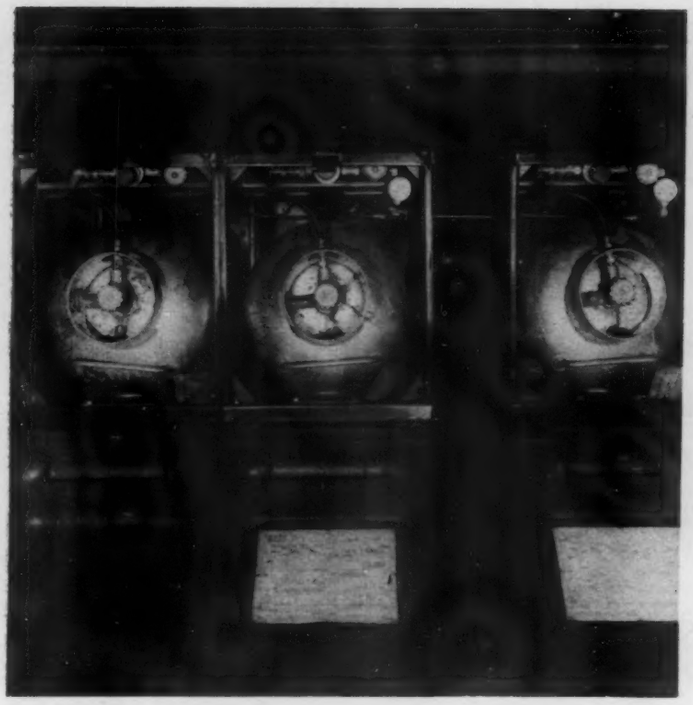
5 A bedroom and the adjacent compartment with the partition folded. The compartment (right) is longitudinal; the bedroom, transverse. The two remaining bedrooms are also transverse. A Lundy water cooler supplies circulating ice water to all rooms

7 The compartment and bedroom, with partition removed, made up for the night. The upper at the right lets down from the ceiling; that at the left is hinged



8 Heavy collision end posts of open-hearth steel are riveted in the cast-steel end member. Center sills are high-tensile manganese-nickel-copper low-alloy steel

9 The car body is built of low-alloy high-tensile steel. The sides are girder type. Subassemblies are welded and riveted, and assembled by riveting. Insulation is Ultralite



10 Fuel tanks for the Waukesha seven-ton ice engine. The remaining air-conditioning equipment consists of a Trane overhead evaporator unit with heating coil built in

11 The end equipment includes Morton diaphragms with sound-deadening buffing mechanism, Waughmat twin-cushion draft gears, and National Malleable Type H tight-lock couplers and yokes. End doors are operated by National Pneumatic door operators

12 Exide 32-volt storage battery with 16 cells in 2-cell monobloc containers has a capacity of 600 amp. hr. at the 8-hr. rate. Electric power is furnished by a Safety 15-20-kw. genemotor

13 Trucks are General Steel Castings four - wheel equalizer type with Edgewater multiple - wear steel wheels, Timken 6-in. by 11-in. roller bearings, Monroe vertical shock absorbers, and A. S. F. unit - cylinder clasp brakes actuated by Westinghouse HSC air-brake equipment without straight-air, speed governor, or decelostat

Investment Bankers Look at the Railroads

[This article is adapted from a report presented by the Railroad Securities Committee of the Investment Bankers Association of America at the association's thirty-ninth annual convention at Hollywood, Fla., November 26-December 1. The views expressed are those of this committee.]

Since the outbreak of the Korean conflict there has been a marked and warranted increase in speculative interest in railroad securities. Earnings for the full year 1950 will materially exceed those for 1949, in which operations were subnormal due to a succession of strikes in the coal, steel and automobile industries, as well as on the railroads themselves. In addition, in view of our projected defense program, the outlook for the next several years also appears favorable from a traffic standpoint. For the conservative investor the near-term favorable outlook, as well as the more fundamental favorable aspects of the railroad situation, apparently continue to be overshadowed by other considerations.

National Transport Policy "Unsound"

Other railroad securities committees prior to this have drawn attention to the improved earnings and financial position of the carriers; the great increase in efficiency of operations which has been achieved through judicious expenditures; and the reduction in indebtedness which has been accomplished during the last decade. Prior reports have also pointed out the unfavorable factors of subsidized competition and the ceiling such competition tends to put on railroad rates; the high break-even point and relatively inflexible costs of railroad operation; and a regulatory policy with respect to rates and fares which is slow moving and not geared to present day conditions. All of these stem from an unsound national transportation policy greatly in need of revision.

The effect of investor prejudice against railroad securities is evidenced in part by the relatively low price at which many outstanding securities sell in the open market. Further, there has been only limited opportunity for the industry to finance by public sale of securities a capital expenditures program which has averaged $1 billion annually for the past several years.

Where financing has been undertaken it has largely followed the form of issuance of equipment trust certificates which, because of their unusual characteristics, can be sold at relatively low interest cost. However, the use of this financing medium is subject to definite limitations. There has been a minor amount of bond financing for new money purposes but, except for one issue of convertible bonds, equity financing has been practically impossible. The greater part of the necessary capital funds has been derived from depreciation allowances or

from retained earnings. As a consequence, the pace of railroad modernization programs is largely geared to prospective earnings rather than the need for the improvements.

How Investment Bankers Can Help

A fair-minded appraisal of fundamentals will support the argument that many railroad securities are more deserving of investor consideration than public market quotations would imply. Investment bankers can render a real service by first educating themselves to this fact and then urging that viewpoint on their clientele. Bankers can also further the cause of the railroads by efforts to assist in the achievement of a sound national transportation policy. The need for such a policy can be brought to the attention of the many users of transportation among capital-seeking clients. The attention of security buying groups can also be directed to this problem by educating them as to its existence and the importance to them of effecting a solution. The combined efforts of many will produce a result which, in the long run, will be beneficial to all.

There are three obvious reasons (and we may have overlooked some others) why investment bankers should be concerned with the railroad problem. First, we have a continuing responsibility to those to whom we have sold railroad securities in the past to do what we can to preserve the soundness of those securities. Second, we have a selfish interest in the railroads as potential seekers of new capital. Third, we, together with many other groups in this country, are engaged in a fight to preserve free enterprise.

Keystone of Free Enterprise

Our railroad transportation system is one of the keystones of our economy and one of the bulwarks of free enterprise. It is one of the first likely to be attacked in further efforts to encroach upon free enterprise if it fails to serve our needs. Thus, we have a responsibility to exert every effort to preserve our railroad system for private ownership.

As we have already indicated, railroad earnings for 1950 will be substantial. Net income may reach a new peacetime high of $725 million, as compared with $698 million for 1948, but it should be noted that there is included in the higher figure about $150 million of retroactive mail pay.

The outlook is for a high level of traffic volume for the next several years, but the profitability of operations will be influenced by the extent to which pending wage demands are satisfied and whether they are offset in whole or in part by compensating rate increases or by further savings through increased efficiency.

The high level of earnings will provide railroad managements with additional funds with which to continue and accelerate modernization programs. The improvement in operating efficiency made possible by such expenditures has been, and should continue to be, a major objective of management. Also, those railroads whose debt structures are still burdensome should seek to effect an improvement in their capitalization by applying a fair proportion of earnings to debt retirement.

During the year now ending the railroads will have raised approximately $275 million of new money through the sale of equipment trust certificates, compared with $445 million during 1949. Other bond financing (including two issues scheduled for December) will total nearly $274 million. Of this, $141 million refunded outstanding obligations and $133 million was for new money. Included in this total, and an achievement of note, was the sale by the Southern Pacific of $37.7 million of convertible debentures at an interest cost much lower than could have been obtained through a straight debenture issue.

As a result of the increased demand for transportation resulting from our preparedness program there has been a substantial step-up in railroad equipment purchasing with deliveries scheduled for next year. In consequence, the volume of equipment trust financing during 1951 could possibly exceed the $445 million of such financing during 1949.

Equipment Financing

Since the end of World War II there has been a sharp increase in the volume of railroad equipment trust obligations outstanding, so much so that some analysts have questioned whether the heavy serial maturities might not raise a problem if earnings were to fall off. We do not have accurate statistics available for all roads, but a compilation covering 39 major Class I roads shows that in 1951 that group will have to meet over $208 million of serial equipment trust maturities. As an offset to this sum, these same roads were accruing $257.6 million for depreciation of equipment, a non-cash charge to operating expenses. It is evident that the margin between maturities and depreciation is still comfortable, although not as much so as in earlier years. However, it should be noted that within the overall picture the position of individual roads may vary widely.

During the year several railroads formulated and consummated plans for the extension of large short-term maturities or their replacement with longer-term issues. The success of these plans was due in large measure to the efforts of investment bankers who assisted in their preparation, and security dealers who solicited the assent of the holders of the old securities. It is to be noted, however, that the fee of ¼ of 1 per cent paid to soliciting dealers is not sufficient to cover the expense of soliciting small holders and it is recommended that where such assents are sought the amount of the fee be increased to a more compensatory amount.

While commenting on financing, mention should be made of a new device commonly known as the "Equitable Plan," which, in some instances, has supplanted the orthodox type of financing the acquisition of new equipment. Under the "Equitable Plan" an insurance company or similar type of investor, working in conjunction with an equipment manufacturer, purchases the desired equipment from the manufacturer and leases it on a rental basis for a period of years to the railroad company desiring the use of such equipment. Unlike the equipment trust method, the railroad does not acquire ownership of the equipment at the end of the rental period, but turns it back to the owner-investor. Railroads that have acquired equipment through this plan have been influenced by what are presumed to be tax advantages and also because they have avoided the necessity of depleting working capital by making the usual down payment required in connection with the orthodox type of equipment trust financing. No exact figures are available as to the extent to which equipment trust financing has been reduced by resort to this method, but estimates place the figure in the neighborhood of $100 million.

This committee has taken no position for or against the plan but is watching its progress with interest. Many mortgage bonds have as one of their security features a lien on the obligor's equipment. Obviously, the "Equitable Plan," carried to an extreme, could vitiate this security provision.

Palletized containers, as illustrated here, show promise of effecting substantial economies in handling bulk storage mail. The use of these containers begins at the post office, as shown in the first photograph above, where the packages are loaded into the palletized containers. Each container holds approximately as many packages as 14½ conventional sacks, and will accommodate most "outside parcels" (packages which are too large or too bulky to fit in sacks)

New test may be one answer to the problem of mounting "head-end" deficits • • •

Savings of as much as 50 per cent in the man-hours required to load and unload bulk storage mail cars at principal railroad stations and terminals may be possible through the use of palletized containers and the mechanized materials-handling methods currently being tested in service by three railroads and the Post Office Department. The New York Central, Pennsylvania, and Atchison, Topeka & Santa Fe are cooperating with the postal service in developing a workable method of reducing the labor and the time required to load and unload bulk storage mail in principal cities.

"Head-End" Traffic Expensive

Recent studies by the Interstate Commerce Commission and by individual railroads indicate that "head-end" traffic—particularly handling costs at stations and terminals—is the most important single cause of passenger service deficits. Mounting labor costs, and the necessity of freeing freight traffic from the burden of passenger service deficits, have made the need for more economical handling methods imperative. Storage mail is one of the principal "head-end" traffic items, and presents some of the most vexing problems.

Under present arrangements, the Post Office Department gives tail-board delivery of storage mail at the railroad station or terminal. The railroad is then responsible for moving the mail from the truck into the proper railroad car. This means that the label must be read and each sack and parcel separated according to destination. The railroad is likewise responsible for the unloading of inbound storage mails from the railroad cars and delivering it to the proper postal truck.

Last year the Santa Fe experimented with "flexible palletiers" for handling bulk storage mail between Kansas City and Oklahoma City. The "flexible palletier" is a patented wood pallet with an iron pipe extending upward at each corner, ending with an inverted conical socket. The pallet rests on conical stub legs which fit into these sockets, permitting one pallet to be piled on top of the other and kept firmly seated in place. In the test, the pallets were placed on hand drawn dollies, two to a dolly, for ease in handling during loading.

The mail sacks and parcels were manually unloaded from the post office truck directly on to the pallets. Next, the loaded pallets were lifted from the dollies to a regular baggage platform truck with a fork lift. The loaded platform trucks were then formed into a train and towed to the train side by the fork lift. At the baggage car door the fork lift placed each pallet inside the car on a small hand jack. The pallets were "stacked" two high inside the car by having the fork lift place the second or top pallet inside the car door, then hoist it high enough for the man inside the car to push the first or bottom pallet under it with the hand jack. The "stacked" pallets were then moved into position in the car with the hand jack. The same procedure was followed in reverse for unloading.

In actual service this method, although it had many advantages, proved to be unsatisfactory principally because the sacks on one pallet tended to "snag" those on adjacent pallets. This was particularly serious when unloading because the normal motion of the car in transit tended to aggravate the interlocking of the loads.

The surface postal transport division of the Post Office Department became interested in this experiment being conducted by the Santa Fe. Together with the equipment manufacturers' representatives who had

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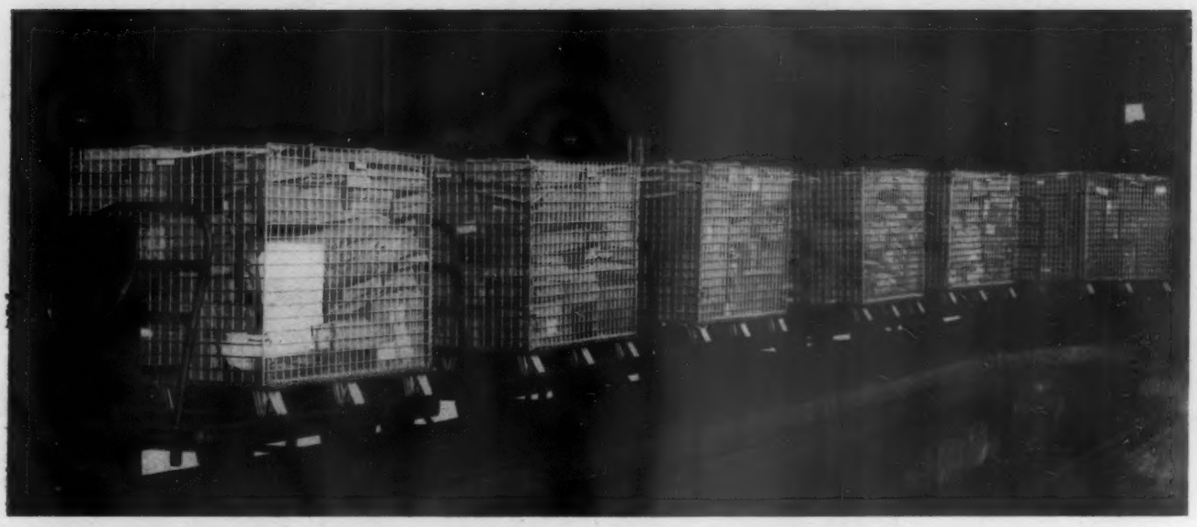
SPECIFICATIONS OF NEW PENNSYLVANIA 60-FT. CAR FOR HANDLING BULK MAIL

(Source: Post Office Department)

60 ft. 0 in. inside length
8 ft. 10¼ in. inside width
7 ft. 0 in. clear loading height
Four doors 7 ft. 0 in. wide—two on each side
Light weight 72,500 lb.
Load limit 65,500 lb.
Nominal capacity 60,000 lb.
Construction—all-welded type using low-alloy high-tensile steel
Lining—⅝ in. plywood
Flooring— two ⅜ in. with two floor stringers each side of center sill
Electric lights—six; power obtained from plug-in receptacles on outside of car
Ends—improved "Dreadnaught" type
Roof—improved "Dreadnaught" type; galvanized steel with diagonal panels
Couplers—New Type F; Interlocking Type
Draft gear—Passenger type; Miner A5XB
Air brakes—Westinghouse ABLB for passenger operation
Hand Brake—Universal non-spin type
Steam train line—2½ in.
Running boards—All metal antiskid type, made by Blaw-Knox Company
Trucks—General Steel Castings Corporation design for head-end service, cast-steel integral-frame type with pedestals for separate journal boxes. Roller bearings. Bolster has swing motion action to reduce lateral shocks. Equalizers are the drop forged type, two per side. Springs are all-helical type having 4¾ in. spring travel. Shock absorbers are the Houde all-friction mechanical type, two per truck. Axles are 5½ in. by 10 in. passenger car type with raised wheel-seat design. Wheels are 36 in. diameter multiple wear, wrought steel. Truck brakes are the Simplex clasp type. Locking type center pins are used.

Mechanical Handling of Bulk Storage Mail



After being transferred from post office trucks at the railroad station to conventional baggage trucks, the containers are pulled to the train platform as shown in the second picture above

At the train side (left), the containers are "stacked" two high by a forked lift truck, and then lifted into the car door and placed on a hand jack being operated by a man inside the car. The wide, high doors of the new mail-storage car developed by the Pennsylvania facilitate this operation. With conventional type baggage cars, the containers must be "stacked" inside the car door. Right—Postmaster General Jesse M. Donaldson shows the advantages of palletized containers as compared to conventional sacks inside a partially loaded car during a special demonstration at Washington, D. C.

Left—This view of parcel post mail stacked during a Christmas rush illustrates the condition the palletized containers were designed to cure. The prevalence of "outside parcels" too large for sacking is evident, as is the enormous task of sorting and handling each parcel and sack in moving it to and from trains and trucks

Right — Hand loading and unloading of storage mail is both slow and expensive. The use of palletized containers with mechanical handling methods promises to speed up this work while effecting economies

helped conduct these tests and the railroad, the postal service felt the idea deserved further study and development. The postal officials also thought the basic idea could be improved so as to simplify and expedite the handling of bulk storage mails by the post office itself.

Containers for Unsacked Mail

These studies led to the selection of a palletized container in which the mails could be placed without sacking. These containers could be loaded at the post office, and then be handled mechanically all the way through to their destination. A container with a 40-in. by 48-in. rectangular palletized base, with a 4-in. clearance from the floor, and with a 36-in. clear loading depth, was selected for the second test. This type gives a 40-cu. ft. capacity, and is ample to handle most "outside parcels" (packages too large to fit in mail sacks). It was determined that these containers should be durable yet light, and should be collapsible without the use of special skills or tools. The sides should be of ample strength to support a fully loaded container when "stacked" two high.

To evaluate the practicality of these new containers under actual service conditions, three tests were planned. It was decided to confine the experiments to the handling of bulk storage mails on three of the heaviest density storage mail runs in the country: the New York Central between New York and Chicago, the Pennsylvania between New York and St. Louis; and the Santa Fe between Chicago and Kansas City. These tests are now in progress. For them the Post Office Department purchased ten different types of palletized containers. Each meets the general specifications outlined above, but is built of different materials and of different designs.

In actual service these palletized containers are handled in the same manner as described for the pioneer test between Kansas City and Oklahoma City, except that the unsacked parcels are placed in the containers at the post office. Railroad employees take delivery of the loaded containers at the station and load them into the railroad cars with fork-lift trucks and hand jacks. The experiments have been confined so far to sealed storage cars operating through between terminals.

Successful Outcome

The experiment has proved successful. The old method of loading sacked mails in cars by hand requires an average of nine man-hours, and unloading eight man-hours, per car. Using palletized containers, the same cars can be loaded with slightly over two man-hours, and unloading with slightly under two man-hours. Whether platforms are at track level or floor level seems to make no appreciable difference in the time required.

At first it was thought that the use of the containers might actually result in slightly lighter carloadings than could be obtained with the conventional method of using hand-loaded sacks and parcels. However, actual experience showed that the containers made heavier loadings possible. It was found that 69 containers can be fitted into a 68-ft. car, and 62 containers in a 60-ft. car. Although the loaded weight of the containers varies widely—from as low as 100 lb. to as high as 900 lb.—the average load is between 400 and 450 lb.

At stations with track-level platforms, fork trucks with 124-in. lifts and 54-in. forks were used. With floor-level platforms, trucks with 72-in. lifts and 54-in. forks were found most suitable. Hand-powered and electrically powered jacks with a 38-in. fork were used for moving the palletized containers within the cars. The mechanical equipment used by the railroads and by the post office in the conduct of this experiment was loaned by the In-

THIS METHOD DID NOT WORK OUT IN PRACTICE— TOP LEFT: Unloading sacked storage mail from the Post Office truck to "flexible palletiers" in the original experiment between Chicago and Kansas City on the Santa Fe. ABOVE: Here a fork lift truck is shown "stacking" the second pallet inside the car door. The lower pallet is being pushed into place under the raised pallet by a man working inside the car with a small hand jack. BOTTOM LEFT: The "stacked" pallets are placed inside the car with a hand jack. The method of using "flexible palletiers" as shown in these photographs did not prove out under actual service conditions because the normal motion of the train caused the sacks to interlock with those on adjoining pallets, making unloading difficult

dustrial Truck Division of the Clark Equipment Company, Yale & Towne Manufacturing Co., Automatic Transportation Company, and the Hyster Company.

The men connected with this experiment are optimistic concerning its practical application. They are now of the opinion that the use of these palletized containers will permit a saving of about 50 per cent in labor costs at principal railroad mail terminals—on condition that in excess of half of the bulk storage mail handled at each terminal is palletized.

The tests showed that certain types of railroad cars now used for storage mails are not readily adaptable for use with these new containers. For mechanical handling, cars should have a floor clear of obstructions (such as stanchions, partitions, shelves or fish racks). Loading and unloading could be expedited further, observers point out, through the use of cars with doors high enough to accommodate two "stacked" containers simultaneously (they must be "stacked" inside the doors of most existing cars). This system also has the backing of postal authorities because it not only helps them save time and labor, but also reduces the opportunities for error, damage or loss by minimizing the handling of individual parcels.

The palletized containers might be used for storage mail movements requiring less than a full car. But, so far, this has not been tried under service conditions. However, it is the opinion of the men best acquainted with the current tests that smaller storage mail movements, particularly those involving "way cars" which are worked at stations en route, may require a somewhat different procedure and a different kind of palletized container. They believe that the use of mechanical handling methods coupled with properly designed palletized containers should permit similar savings in handling these types of storage mails.

Pennsylvania Storage Mail Car

In connection with this experiment the Pennsylvania has developed a new railway mail storage car specifically designed with the possible use of palletized containers in mind. Officers of the road estimate that this new car can be produced at about one-quarter the cost of conventional baggage cars in which storage mail and express are usually handled. This car is also designed for minimum upkeep. In addition to meeting the specifications for handling the mails, its functional design makes possible diversion to other types of revenue service.

This new car has four large doors, each wide and high enough to permit the admission of a forked lift truck carrying two "stacked" palletized containers. Its total carrying capacity is almost three tons more than conventional baggage cars of the same length. The car is equipped with high-speed trucks, and has both steam and air lines so that it can be used interchangeably in passenger or freight service.

A non-skid floor was used for platforms of bridges

Bridges Expedite

Southern installs four crossover structures at its l.c.l. station in Atlanta, Ga., to obtain one-level operation

Several years ago, when attempting to reduce the time and cost of handling l.c.l. shipments at its large freight station in Atlanta, Ga., the Southern built three removable wood crossover bridges to connect the centers of three long island platforms with the freighthouse. Freight is handled at this point by both electrically-operated and hand trucks. While the bridges obviated the need for the platform trucks to travel down ramps and around the ends of the platforms, they were not entirely satisfactory. Much of the time of six men was required to move each bridge twice a day, encroaching on the productive time of the freight station. The road therefore replaced the wood bridges with four motor-operated steel lift bridges which are raised at night to permit loaded cars to be hauled out and approximately 100 empty cars to be set in for loading the next day. Capable of being quickly raised or lowered, the new bridges have effected substantial economies in both time and expense.

The freight station is part of a large eight-story structure which combines the freight station, warehouse and office in one building, the ground-floor level of which is used for handling l.c.l. freight. This station is served by eight tracks which are separated by three island platforms into groups of three, two, and three tracks. Three of the steel lift bridges were installed approximately in a continuous line near the midpoints of the island platforms. Because the line of lift bridges is located near one end of the freighthouse, a fourth lift bridge was placed near the other end of the structure to connect with the nearest platform and to provide more flexibility in handling merchandise.

The two crossover lift bridges spanning the three tracks between the freighthouse and the nearest island platform have a span of 35 ft. The next bridge, spanning the two tracks between the first and second island platforms, has a span of 23 ft., and the bridge spanning

A permanent roof was placed over each bridge to permit freight-handling operations to continue during rainy weather without damage to lading

Freight Between Platforms

the three tracks between the second and third platforms has a span of 35 ft. During daytime operation of the freighthouse, the bridges are in their lowered position with their running surfaces at the same level as the freighthouse floor and the decks of the island platforms. When raised at the close of the day's operations, a clearance of 18 ft. from the tops of rails is provided for switching.

The platform of each bridge is comprised of steel channels and a steel-grid floor, and is supported by steel bridge columns by means of lift cables reeved around sheaves placed at the tops of the columns and around a rope drum fixed near the ground line. The drive of each bridge consists of a 7½-hp. electric motor, an enclosed herringbone reducing gear, a welded-steel base plate, and a pair of spur gears to a cable drum—all mounted on a concrete foundation pier. The motor and herringbone reducing gear are accurately alined and are connected to each other by a flexible coupling. An electric solenoid brake serves to arrest motion quickly and to hold the bridge at the moment that power is interrupted.

Each bridge platform is raised by push-button control, which starts the motor drive and pulls up the platform. When the bridge reaches the top level, it trips a limit switch that automatically shuts off the power. The bridge is held in that position until a reversing push button is pressed, which operates the drive in the opposite direction and brings the bridge down to freight-loading level. Metal pedestals on concrete foundations, placed between tracks, provide additional support for the platform while the bridge is in the lowered position.

The lift bridges were installed under the general direction of J. B. Akers, chief engineer of the Southern. Detailed plans for the bridges were prepared by the Link-Belt Company, Chicago, which also carried out the field construction work.

Pedestals between tracks give additional support to the bridge platforms when in the lowered position

When the bridges are in the raised position a clearance of 18 ft. above tops of rails is provided for switching cars

Electric Motive Power for the

New steeple-cab locomotives are part of Montreal terminal modernization plan—Operate up to 60 m.p.h. using motors identical with those on multiple-unit cars

The three new locomotives delivered by the General Electric Company to the Canadian National in July of this year represent one step in a comprehensive modernization program for that road's electrified Montreal terminal. In addition to this new motive power, the plan calls for revamping of the existing fleet of 15 electric locomotives, and the addition of suburban multiple-unit motor cars and trailers. An unusual feature is the use of the same traction motor (GE-754) on all equipment. This is definitely advantageous from the maintenance viewpoint.

Use of Locomotives

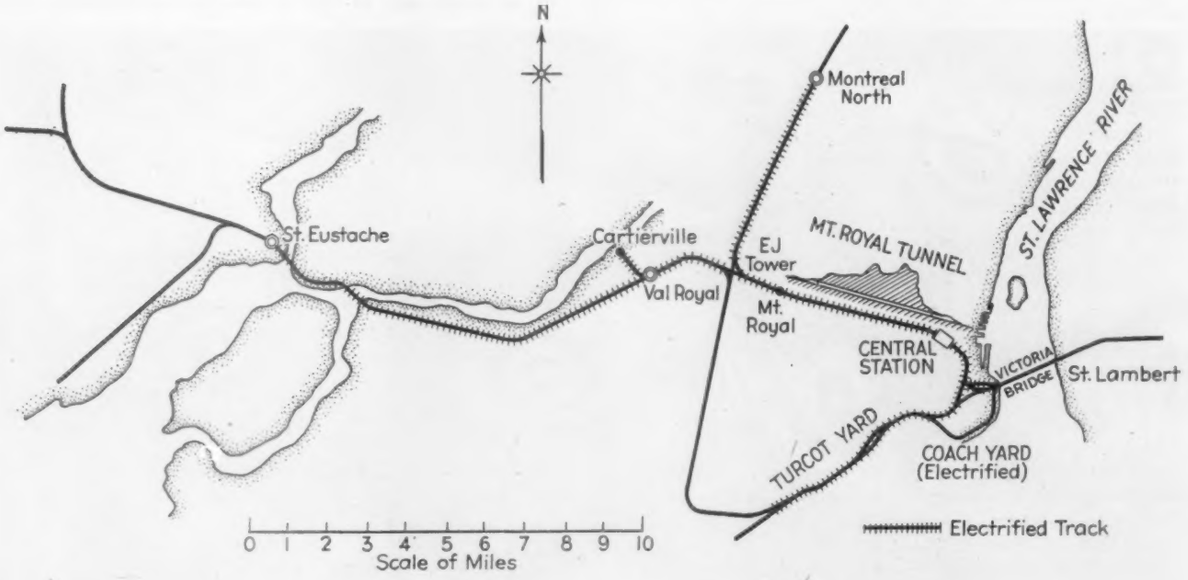
The 2,400-volt d.c. electrification in the Montreal Terminal zone was started in 1914 as part of the former Canadian Northern passenger station development. To give access to the center of the city, a tunnel was built under Mount Royal, a beautiful mountain park in the heart of Montreal. This tunnel is a double-tracked bore 3.1 miles long, and has a uniform rising grade of 0.6 per cent from the terminal station. The initial electrification covered about 7 miles, including the tunnel. It opened up for residential purposes a large area only a few minutes by train from the business section of the city.

Subsequently the electrification was extended until it now comprises about 27 route miles. This includes the terminal and tunnel, a coach yard in the city, a suburban service branch and the line west to St. Eustache. The accompanying map shows the general layout of the trackage in this zone.

After the consolidation that formed the Canadian National, the development of the Montreal terminal was commenced in 1929. Work was suspended for several years, but finally in 1943, the new Central Passenger Station was opened.* This modern, three-level station serves trains entering and leaving Montreal in all directions. Four of the 21 tracks in the station are through tracks with platforms long enough to accommodate 20-car trains. The station tracks connect with the double tracks of the Mount Royal Tunnel on the north, and with six main tracks, tapering down to two, on a viaduct extending southward to the Victoria Bridge.

The new locomotives are designed for passenger service and may be operated in multiple. They weigh

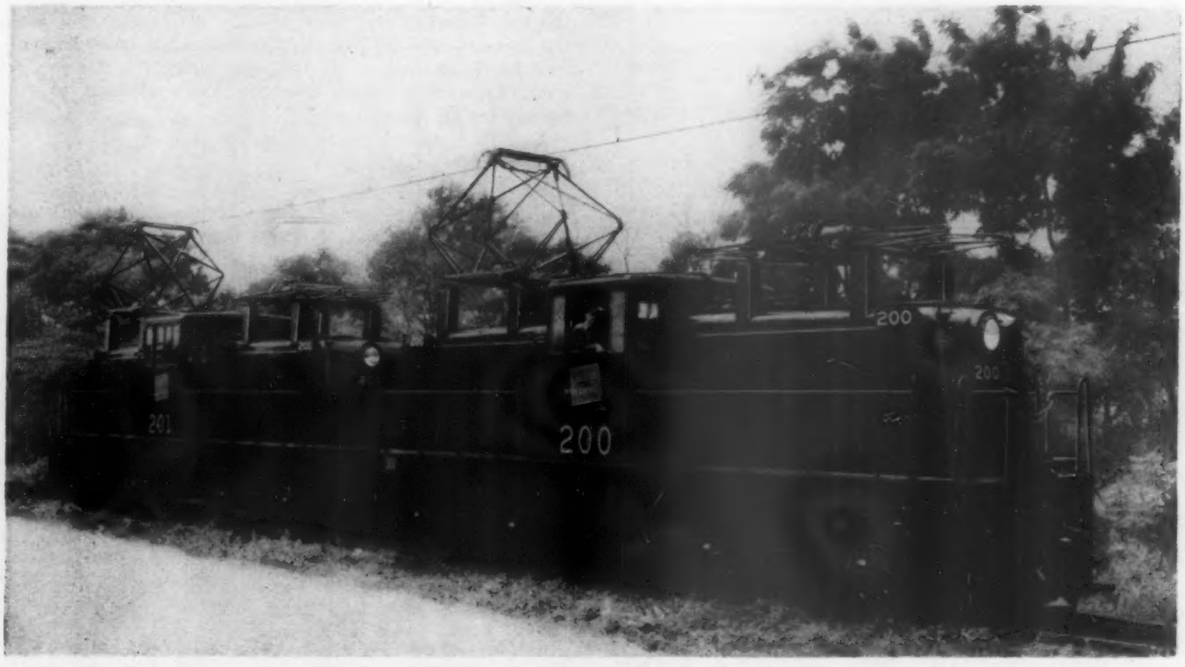
*An illustrated description of the station and related facilities appeared in Railway Age of July 31, 1943, page 201, and August 7, 1943, page 234.



Map of the Montreal Terminal electrification

Canadian National

By W. A. BAILEY
Locomotive Engineering Division
General Electric Company
Erie, Pa.



Two of the new Canadian National electric locomotives coupled for multiple-unit operation

85¾ tons each, and have a length of 42 ft. 10 in. over couplers. The superstructure is of the steeple type, with a central engineman's cab located between two apparatus compartments that extend to the ends of the locomotive platform.

Running Gear, Brakes and Motors

The running gear consists of two 2-axle swivel trucks. Truck frames are of welded construction, being fabricated of steel plate throughout. Each truck is fitted with a swing bolster, which is supported on a spring plank by elliptic springs. The truck frame is supported on the equalizer by helical springs. All axles are fitted with 6-in. roller-bearing journals. Rolled steel wheels 40 in. in diameter are used.

Single shoe brakes are employed, and the brake rigging is designed to give a total braking pressure of approximately 75 per cent of the weight on drivers with 50 p.s.i. cylinder pressure.

Each axle is driven by a type GE-754, 1,500-volt, d.c. railway-type motor. This motor is of the conventional 4-pole, series-wound, axle-hung construction. It is fitted with single-reduction gearing having a ratio of 67 to 16, and suitable for a maximum locomotive speed of 60 m.p.h. Both pinion and gear are solid.

With 2,200 volts on the trolley, the locomotive has a continuous tractive force rating of 17,900 lb. at 22 m.p.h., and a one-hour rating of 21,200 lb. at 21.7 m.p.h. Characteristic curves of the locomotive in both low- and high-speed motor connections are shown in Fig. 1.

Two I beams form the main center sills of the locomotive platform. The space between them is used for the ventilating duct which conveys air to the traction motors. The side channels, end plates, deck plates and bolsters are securely welded together and to the I beams to form the underframe. A pocket at each end of the platform carries the friction draft gear and type-E coupler.

As shown in Fig. 2, the apparatus compartment at the No. 1 end of the locomotive houses the high voltage equipment, and is divided into two sections. The one adjacent to the engineman's cab houses the high-voltage fuses, the high-speed circuit breaker, and other pieces of control equipment. The forward section contains the accelerating resistors. A single door, located adjacent

FACTS ABOUT THE CLASS Z-5A LOCOMOTIVES

Length inside knuckles	42 ft. 9⅞ in.
Total wheel base	29 ft.
Height over pantographs locked down	15 ft. ½ in.
Width over cab	10 ft.
Wheel diameter	40 in.
Total weight of locomotive in running order	171,900 lb.
Weight per driving axle	42,925 lb.
Maximum permissible speed	60 m.p.h.

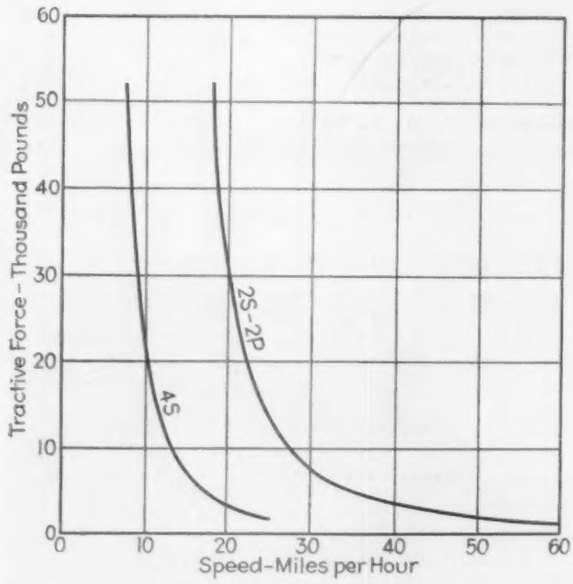


Fig. 1—Locomotive characteristic curves

to the engineman's cab, gives access to the apparatus section. The other covers on the compartment are hinged, but are bolted in place to prevent access to the high-voltage equipment except for repair or replacement. There are no louvers in either the door or covers of the No. 1-end apparatus compartment. The accelerating resistors are cooled by air furnished by the same blower that ventilates the traction motors. This construction was adopted to protect the equipment against snow during the winter.

Located in the No. 2-end apparatus compartment are the motor-generator-blower set, the air compressor and the low-voltage control equipment. This compartment has doors on both sides for easy access to the equipment. Louvers are built into the doors adjacent to the blower for air inlet.

Engineman's Cab

The engineman's cab is in the center of the locomotive. It is fitted with two operating positions, each with a complete set of electric controls, air brake valves and instruments. This feature permits operation in either

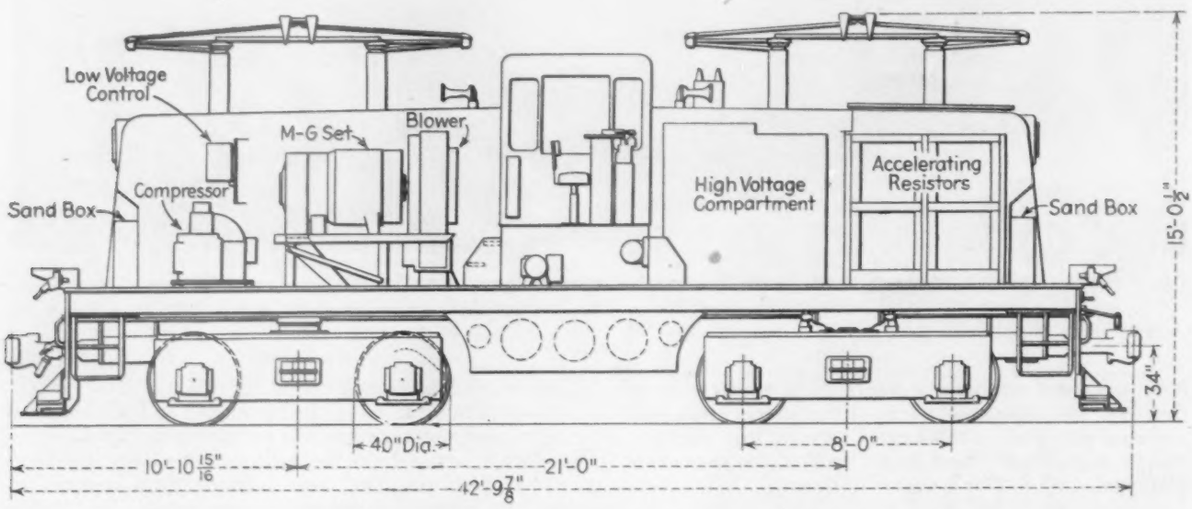


Fig. 2—General location of apparatus on the locomotive

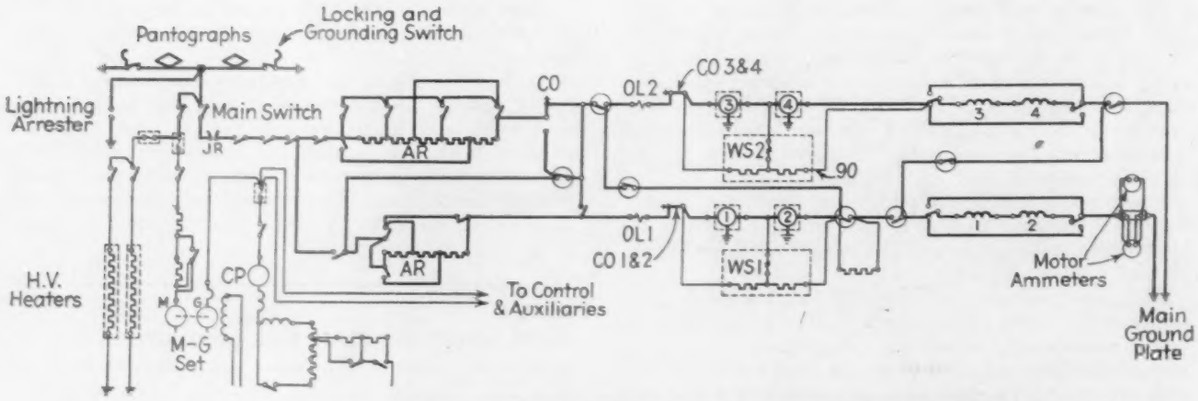


Fig. 3—Simplified schematic wiring diagram of main locomotive circuits

AR—Accelerating resistor
CP—Air compressor
CO—Motor cutout switch
OL—Overload relay
WS—Wheel slip relay

direction with equal facility, a decided advantage in the short passenger runs where turntables or loop tracks are not available at the ends of the run.

Schedule-14 EL air brakes are provided on the locomotive, along with a 150-cu. ft. per min. air compressor and approximately 50,000 cu. in. of reservoir capacity.

Power at 65 volts for the air compressor, as well as the locomotive control, lights and low-voltage heaters, is furnished by the d.c. generator on the motor-generator-blower set.

Current collection from the overhead wire is by means of two double-shoe, spring-raised, air-lowered pantograph trolleys, located over the apparatus compartments at each end of the locomotive.

Control Equipment

The control equipment is of the electro-pneumatic type, and is designed so that two locomotives can be operated in multiple if necessary. It is arranged to give two motor combinations. For low speed, all four motors are connected in series. For high speed, they are connected two in series, two groups in parallel. Fig. 3 is a schematic diagram of the main circuits. The master controller provides 11 accelerating and one running notch in the low-speed range, and eight accelerating and one running notch in the high-speed range. Protection is furnished by high-voltage fuses, a JR-type high-speed circuit breaker, and overload relays. Wheel-slip indication is given in the engineman's cab by means of a pair of voltage relays, each connected to measure voltage differential between the two traction motor armatures that always operate in series.

The railway has classified these locomotives as Z-5a. They are used in passenger service, primarily on the suburban trains north and west from Central Station to Montreal North and St. Eustache. This is a rather unusual application of steeple-cab, swivel-truck locomotives, but tests have demonstrated their good riding qualities at speeds up to 60 m.p.h.

New Books . . .

HIGH GREEN AND THE BARK PEELERS, by R. M. Neal. 275 pages. 8½ in. by 5½ in. Bound in cloth. Published by Duell, Sloan & Pearce, 270 Madison Ave., New York 16. $3.50.

It would be a mistake to describe this book as "a history of the Boston & Maine." It is not; its historical references are few and far between. It is rather, a sketch of the present-day B. & M.—a "profile" (though not in the ordinary engineering sense) of the railroad and of the men, of all ranks, who run it.

It may have been an equal mistake to assign this book for review to an editor whose nightly boyhood lullaby was the thundering staccato exhaust of "B. M." locomotives pounding up the Fitchburg division's Ashburnham hill. Such a reviewer finds it frankly difficult to maintain a properly objective attitude toward this book — which must have been grand fun to write and is absorbingly interesting to read.

In slight obeisance to the ideal of objectivity, let it be recorded that the book might have been improved—even to the extent of justifying a slightly higher selling price—by inclusion of the map which no railroad story should ever be without, and of some of George Hill's superb railroad photographs.

Otherwise, "High Green and the Bark Peelers" is a fascinating account of modern railroading on a road that has made an amazing comeback over the past quarter-century. As another obeisance to reviewer's objectivity, some railroad men may consider the book to be pretty elementary, at least in spots. But it was, after all, written by a non-railroader, and principally, apparently, for non-railroad readers. Even so, there are probably few railroad men who won't find in it some bits of new and interesting information. And there are unfortunately many who could improve both themselves and their companies by adopting the attitudes and practicing the philosophies of some of the B. & M. men with whom Professor Neal associated in gathering his material.

The lay reader, be he rail fan or not, can hardly fail to close the book with a deeper appreciation of railroads and of railroad men, and of some of the problems they face. Not that it is "propaganda"; there are only scanty references to such things as subsidized competition. But because the book is the story of men — from executive v.-p. and division superintendent to interchange clerk and station caretaker—doing their respective jobs to the best of their respective abilities. That makes it, so far as this reviewer knows, virtually unique among railroad books of recent years. And it deserves, by any standard, a high place among them and in the literature of the industry.

MILEPOSTS ON THE PRAIRIE, by Frank P. Donovan, Jr. 352 pages, illustrations. 5½ in. by 8½ in. Bound in cloth. Published by Simmons-Boardman Publishing Corporation, New York 7. $4.50.

Subject-matter is—like talent—"born and not made." For the historian there is plenty of romance at hand in a big transcontinental rail "empire" or one of the ancient corporations along the Atlantic seaboard. But a smallish, midwestern "granger" line—which never, until recently, had enough money to create much excitement or do many revolutionary things in the art of railroading—is another matter altogether.

Yet Frank Donovan has succeeded in wrapping up a novel, a romance, a history and collection of personal "profiles" all in one package about just such a property. It is as exciting, too, as any railroad history this reviewer has ever read, despite the absence of God-given "gimmicks" on which a less-enterprising author would have had to rely. This is not to say that the M. & St.L. is not exciting, but rather that it lacks the conventional raw material of glamor.

The fact is that, unlike most roads, the most dramatic period in the life of this company is the decade which has not yet ended. For sheer interest and excitement it would be hard to beat the story of the road's struggle against dismemberment and oblivion, told chiefly in the chapter entitled "Oh No, Day Kan't Do Dat!" Yet it all happened just a few short years ago. From this tangled legal and political mess—plus the desperate heroism which resolved it—the author weaves an easy-reading story, which must have cost him many a difficult rewrite.

The only possible fault in this narrative is that, for objective historical record, Mr. Donovan is too hard on the railroads and other interests seeking to take over the bankrupt M. & St.L. They really were not the villains he makes them appear. One of the editors of this paper described them as "the Doctors Were Wrong" back in 1940, a characterization which is probably more accurate.

This fault arises from a brand of partisanship which is, on the whole, responsible for the exhilarating tone of the book—great love for the railroad as an entity in itself. Fortunately, this devotion in no way extends to blindness to faults of M. & St.L. men or groups in the past. The book is *not* a "whitewash history." Author Donovan writes that President L. C. Sprague, in throwing open the records for study, "gave me the liberty of interpreting them as I saw fit; at no time did he tell me what to write or how to slant any phase of the road's long and checkered history."

This book makes much of the railroad's employees. It should. They had much to do with its survival in the recent

past. In its report on the proposed parceling out of the long-bankrupt property, the Interstate Commerce Commission, not usually given to sociological observations, commented: "There is perhaps no railroad in the Middle West that has a more loyal staff of employees." Of these men Donovan writes movingly and interestingly, in accordance with his own premise that a railroad is "95 per cent men—and five per cent iron." There are writers whose "human interest" chapters are obviously synthetic, added because it is "the thing to do," and not because they really like men or ever made their acquaintance. The characterizations in "Mileposts on the Prairie" are genuine.

This book is the result of a long period of hard, basic research which ranged sufficiently afield from the property itself to enable the author to put events on the M. & St.L. in proper setting and to bring in such influential groups as the "Waldorf crowd" whose activities were national. One can learn here much about railroads in general that has not hitherto been readily available. In its highly original "dedication," expressed in the dots and dashes of Morse, in the heading of the table of contents as "Consists," the book evidences experimentation with method of treatment and style. The illustrations are fresh, numerous and obviously hard to come by.

Communications . . .

How to Interest Employees In Cutting Railroads' Tax Load

ROUTE 1
WEST CHICAGO, ILL.

TO THE EDITOR:

Manufacturing concerns, unlike railroads, are in a position which permits immediately passing on to the consumer increased costs due to the rising tide of corporate income taxes. It is a long and slow process, on the other hand, for commissions under political control to approve higher freight or passenger rates for the railroads. And rarely are rates approved which fully cover the railroads' increased costs.

Now comes a proposal to jump the corporate income tax from its present 45 per cent to a figure somewhere between 55 and 67 per cent. Yet any offsetting advance in railroad transportation charges will be fought by practically all railroad users. And it is unlikely that politically controlled commissions would allow rate increases adequate to cover these new taxes, to say nothing of the ever-rising local real estate taxes which the railroads pay.

With the ever-increasing demands of the tax gatherers and the railroad workers on the one hand, and the ceiling-like rate pressure on the other, the railroads are indeed headed for a stormy era, a threatening one for workers, investors and management alike. Disaster may overtake many of the weaker lines.

The first peacetime corporate income tax became law in 1909 under President William Howard Taft. It was for one per cent! It was passed specifically to head off agitation for a personal income tax. The Taft forces, lead by Senator Aldrich, frankly said that this tax would be passed on to the consumer. Senator Borah opposed the corporation tax for the same reason. If this one per cent was to be passed on to the consumer, what happens to the current 45 per cent tax?

The corporation income tax is one of our most unfair taxes, along with the excise tax, since both must by their very nature be passed on to the consumer, hitting the average man hardest. When the government raises this tax, the price of goods and services must generally be increased to cover it and workers are thus rightly encouraged to ask for higher pay to meet their increased living costs.

As an alternative, it it proposed that:

> The federal income tax law be amended so that the corporation income tax would be waived for any corporation that will voluntarily share its dividends equally between the common shareholders and the employees (i.e., those below the executive level).

This is strictly an American idea. Note that it is voluntary. The corporation could go on paying its tax as usual, or it could elect to share dividend payments and waive the tax. No set or fixed amount need be paid.

A big, yet typical, example of how this would work: The federal government in 1949 took $450,000,000 in corporation income tax from the General Motors Corporation. The common shareholders received $350,000,000. Since the stockholders' share was paid in spite of the tax, it must be assumed here that the total of the two, or $800,000,000 could have been disbursed under the proposed dividend sharing plan — $400,000,000 to the shareholders ($50,000,000 more than they actually were paid) and $400,000,000 to the 400,000 employees ($1,000 to each, on the average).

If all corporations in the city of Chicago had operated under this proposal in 1949, more than $1,000,000,000 extra would have been left in Chicago instead of going to Washington. And 80 per cent of that money would have gone into the pockets of workers who largely earned it. Similarly, the people of Rockford (Ill.) would have had more than $20,000,000 to save, or spend at home. Remember, too, these figures apply under the 38 per cent tax which has been raised 20 per cent and is now headed higher.

The "dividend-sharing — no federal tax" proposal is receiving steady support from workers, investors, management and economists. I submit it for your studied consideration. Comment and questions are invited.

JAMES F. LOWE

(Mr. Lowe is a member of the Board of Trade of the City of Chicago.—EDITOR)

Is the Railroad Inspector Necessary?

CHICAGO

TO THE EDITOR:

The editorial which appeared on page 45 of the September 9 *Railway Age*, entitled "Is the Railroad Inspector Necessary?" is inclined to belittle the definite value accruing from a railroad's competent and comprehensive inspection in the plants of the companies building their cars or locomotives. It offers builders' guarantees as a substitute.

The builder's guarantee exists whether the railroad inspects or not and the buyer's inspection in no way relieves the builder from his responsibility of furnishing materials in accordance with the requirements of his contract. Furthermore, no builder's guarantee, to the best of the writer's knowledge, has ever extended beyond the replacement of material or parts found defective. This does not protect the railroad against increased maintenance cost, derailments, and the many other expenditures resulting not only from defective materials but from poor or questionable workmanship in fitting and in the assembly and fabrication of parts.

The article offers the suggestion that the railroads should not pull men off their shop jobs to serve as inspectors. Now we think that point is sound and that is one reason such concerns as Robert W. Hunt Company, Engineers, maintain both car and locomotive inspection departments, which can serve any railroad efficiently and effectively and usually at a distinct economy. The personnel of these departments are experienced and competent and the service not only of one inspector is used on an equipment order but of such men as are necessary to secure for the railroad the assurance that the equipment is built properly to the contract requirements and service needs.

The Hunt organization is used by both large and small railroads on large and small orders and generally the cost of inspection can be predetermined and is consistent only with value received.

H. A. FORD
Manager, Railway Car Department
Robert W. Hunt Co.

GENERAL NEWS

Mail-Pay Agreement Approved by I. C. C.

Settlement will give railroads about $152 million

The Interstate Commerce Commission has approved the agreement which the railroads and Post Office Department entered recently to settle the retroactive phase of the mail-pay case. Under terms of the agreement, the railroads will receive additional payments aggregating about $152 million for carrying mail during the past four years.

Commission approval of the pact came in a December 4 report in the mail-pay proceeding—No. 9200, wherein the railroad application seeks an increase of 95 per cent in the mail-pay rates that were in effect on February 18, 1947, the date on which the original application was filed. The 95 per cent proposal amounts to a request for an increase of about 56 per cent in present rates, which include an interim increase of 25 per cent. This rates-for-the-future phase of the case is scheduled for further hearing on December 18.

Provisions for Future

The agreement which settled the retroactive phase also had provisions relating to the future mail-pay rate structure. They call for separate line-haul and terminal charges and for elimination of specific payments for return of empty cars on the same basis as payments for loaded movements. The latter will apply to all cars used for handling mail except railway post office cars. (See *Railway Age* of September 30, page 42.) In approving the back-pay settlement, the commission approved the whole agreement, including these provisions. All terms, it said, are "fair and reasonable."

The majority decision was accompanied by a concurring opinion by Commissioner Mitchell, to whom the case is assigned for administrative handling, and a dissent by Commissioner Lee. Commissioner Mitchell emphasized his view that the commission, though in no way bound by the agreement, had full authority to act as it did. Dissenter Lee contended, on the other hand, that the commission's authority to fix mail-pay rates does not include authority to approve agreements like that involved.

The agreement actually provides for payment by the Post Office Department of $312 million for settlement of the case's retroactive phase. However, the amount which the 25 per cent interim increase has yielded (about $160 million) is included in the settlement figure. Thus the additional amount to be paid the railroads will total about $152 million, as noted above.

Percentagewise, the settlement is equivalent to an increase of 49 per cent in the February 18, 1947, basis of mail pay. The period covered by the settlement is from February 19, 1947, through December 31, 1950. The rates which the commission fixes for the future are expected to be made effective as of January 1, 1951.

Payments Still Below Costs

The present commission report was devoted principally to a review of cost figures and other evidence submitted by the parties in support of their request for approval of the agreement. The railroad cost studies indicated that the February 18, 1947, basis of rates failed by more than $885 million to pay costs of the service during the period covered by the agreement. Post Office Department figures indicated that the deficit was $378 million.

"It is clear," the commission said, "that, for the stipulated period, the sum of $312 million agreed to by the parties as additional compensation plus the mail revenues for that period, computed at the basic rates in effect February 18, 1947, is not in excess of a reasonable estimate of the costs . . . incurred by the railroads in transporting the mail and performing services in connection therewith."

Dissenting Opinion

In his dissenting opinion, Commissioner Lee said that the Mail Pay Act of 1916 contemplated that the commission should fix mail pay on a weight, or space, or "other service-unit" basis. He added that the act did not confer upon the commission jurisdiction to approve "compromise agreements" between the postmaster general and the railroads. The dissenting commissioner conceded that the act does authorize the postmaster general to make special contracts with railroads where, in his judgment, conditions warrant the application of higher mail-pay rates than those prescribed by the commission. The commission has no jurisdiction over such an agreement, Mr. Lee added.

He also said he was "not persuaded" that the commission, prior to the conclusion of hearings on the whole mail-pay proposal, should modify the 25 per cent interim increase—"or bind itself with respect to the manner in which rates or compensation for the future shall be stated."

Commissioner Mitchell's concurring opinion dealt with the points raised by his dissenting colleague. It quoted from the Mail Pay Act language stipulating that mail-pay rates may be prescribed "otherwise" as well as on a weight or space basis. That Mr. Mitchell did not agree that "otherwise" meant "other service unit" was indicated when he said that the commission is "not restricted in any way" as to the method by which rates shall be ascertained.

Commissioner Mitchell also said that the commission was not bound to fix the back pay at the amount stipulated in the agreement. He did insist, however, that the commission had authority to consider the proposal and the supporting evidence; and that it was not bound to put off its decision on the retroactive phase of the case until evidence was submitted as to what level of rates should be prescribed for the future.

With respect to the authority of the postmaster general to make "special individual contracts" with railroads, Commissioner Mitchell suggested that "it need only be observed that the authority has never been considered as applying to agreements for higher rates for the railroads as a whole." It was his view, therefore, that such authority "has no application in his general rate proceeding."

Wildcat Strike Ties Up Chicago Terminal Roads

About 10,000 switchmen in the Chicago terminal area remained home or reported off "sick" starting Wednesday morning, December 13, delaying or halting most passenger and freight terminal operations in the Chicago area. At press time, the strike was still spreading in the Chicago area even though the Department of Justice, on behalf of the army, had obtained an injunction from the Federal District Court at Chicago ordering the Brotherhood of Railroad Trainmen to halt the unauthorized strike.

In the early stages of the strike W. P. Kennedy, B.R.T. president, instructed all his men to return to work at once. However, in a manner reminiscent of recent coal strikes, Chicago officers of the union took immediate steps to comply with the order, but indicated skepticism as to its effectiveness "because no one has authorized a strike."

Effects of the strike spread swiftly through the Chicago industrial area as steel mills began to bank blast furnaces, and other industries slowed

IN THIS CONCOURSE of the new union station at Akron, Ohio, the entire floor, measuring 30 ft. by 200 ft., acts as a radiator in cold weather; the terrazzo surface of the floor has been laid over grids of wrought-iron pipe which radiate heat from constantly circulating warm water

down or halted for lack of inbound materials. Postal officials said continuation of the strike would mean a major delay in Christmas mails now moving through Chicago—normally a major transfer point for transcontinental mails.

All the "sick" switchmen are represented by the B.R.T. and are currently involved in a dispute with the railroads over a 40-hr. week and pay increases which led to governmental seizure of all railroads last August 27. Chicago union officials termed the organized "sickness" as spontaneous, and added "the men just blew up. They're tired of waiting while Washington muddles around." The union has rejected recommendations advanced by the emergency board constituted to handle the dispute. Meanwhile, in Washington the presidents of four of the operating unions—except the Switchmen's Union of North America—hinted that wildcat strikes might spread among their membership unless mediation efforts are stepped up.

A joint statement issued Wednesday night by the presidents of the four operating brotherhoods charged the railroads with a "do-nothing, sit-tight" attitude. "The situation is very serious and critical and requires decisive action," the statement said. It added that there must be "substantial" wage increases to meet higher living costs and higher taxes, and said further delay may result in the migration of hundreds of workers into defense industries. The statement also charged the railroads have a "complete disregard for the welfare of their loyal, trustworthy employees upon whom they must depend for successful and profitable operation."

On Thursday morning the strike had spread to terminals at Washington, D. C., and St. Louis, Mo. At St. Louis that morning only 14 of 96 crews showed up.

In Washington, Assistant Postmaster General John M. Redding, told reporters the three terminal work-stoppages have "effectively crippled" the mail distribution system, and said the Post Office may have to place an embargo on all bulk mail moving between New England and the south and between the east and west.

Mr. Redding said also it might be necessary to shift all first-class mail to the air lines. He indicated a final decision probably would be made not later than Friday.

Draper Announces Policies for Long Island

His intention to follow, so far as practicable, a "goldfish bowl policy" of "widest possible publicity for every action," was announced in a December 12 address at Hempstead, N. Y., by William H. Draper, Jr., who, as reported in the financial news columns of this issue, has been appointed as the new trustee of the Long Island, subject to confirmation by the Interstate Commerce Commission.

Mr. Draper further stated that, if his appointment as trustee is confirmed by the I.C.C., he would appoint as general manager of the Long Island Frank H. Simon, who is presently superintendent of transportation of the New York City Board of Transportation. David E. Smucker, whose November 29 resignation as trustee and chief operating officer of the railroad is to become effective upon appointment and qualification of his successor, will continue, Mr. Draper said, as consultant to him and to Mr. Simon.

Mr. Draper further revealed that one new safety measure under present consideration is the equipping of all headlights on Long Island multiple-unit cars with red Plexiglas lenses, to be either mechanically or manually operated. When a train is stopped for any reason, this red lens could then be placed over the rear headlight, as an additional warning light to following trains. The new red lenses, it is understood, would supplement existing oil marker lamps.

Strike at Baldwin

Approximately 50 members of the Pattern Makers' League of North America (A.F.L.) who are employees of the Eddystone, Pa., plant of the Baldwin-Lima-Hamilton Corporation, struck at 8 A.M. December 13 on an issue involving wages. The prior contract with this union expired August 31. In subsequent negotiations, the company has offered a wage increase, paid holidays and improved insurance benefits, all equivalent to more than eight cents an hour. This is comparable to the eight-cent an hour increase recently granted company employees who are members of the Steelworkers Union (C.I.O.), because the pattern makers previously were given a wage increase instead of paid holidays and improved insurance arrangements at the time these benefits were granted to other employees.

Morison Appointed Head Of Antitrust Division

Assistant Attorney General H. Graham Morison has been appointed head of the Antitrust Division, Department of Justice, to succeed Herbert A. Bergson who resigned last September.

Mr. Morison has been serving as chief of the Claims Division, and has been assisting the Economic Stabilization Agency. He will assume his new duties upon completion of his present work with E.S.A. Mr. Morison was assistant to the general counsel of the War Production Board in the early part of World War II.

November Employment

Railroad employment increased 0.09 per cent—from 1,290,895 to 1,292,107—from mid-October to mid-November, and the mid-November total was 15.96 per cent above that of November, 1949, according to the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. The index of employment, based on the 1935-1939 average as 100, was 125.5 for November, compared with 122.4 for October, and 108.2 for November, 1949.

November employment was below that of the previous month in 4 of the 7 groups, the range of the decreases being from 1.04 per cent in the maintenance of way and structures group to 0.07 for the professional, clerical and general group. Largest of the in-

creases in the other three groups was 1.09 per cent in maintenance of equipment and stores.

As compared with November, 1949, employment increased in all groups. The increases ranged from 29.81 per cent for the maintenance of way and structures group to 0.58 per cent for the group embracing executives, officials and staff assistants.

Union Wants Self-Propelled Cars Subject to Loco. Rules

The Brotherhood of Locomotive Engineers has asked the Interstate Commerce Commission to extend present locomotive inspection rules to include self-propelled units designed to carry freight or passenger traffic in multiple-unit service operated by a single set of controls.

The "complaint and petition" filed with the commission asked that "all Class I carriers subject to the Boiler Inspection Act" be made parties to an investigation proceeding. However, it referred specifically to the Long Island and Hudson & Manhattan as examples of roads that operate and use the self-propelled units in multiple unit service.

In 1925 the commission "properly required" the observance of rules and regulations for inspecting and testing of locomotives other than steam, insofar as such locomotives constitute units for moving other equipment, the petition said. But the order "improperly and without lawful authority" found that multiple-unit cars designed to carry within themselves passengers or freight were not subject to the rules and regulations.

The petition urged the commission to amend the 1925 order, and adopt "stringent rules and regulations" for the inspection and testing of this equipment.

S. P. Replies to Charges About Its Car Service

Replying to a recent complaint by the West Coast Lumbermen's Association, the Southern Pacific has told the Interstate Commerce Commission that it would be "unfair and ineffective" to investigate freight car service on the S.P. without considering the national car supply situation at the same time.

Between 1940 and 1950 the S.P. has purchased 38,213 new freight cars, and since 1945 the road has spent $228.5 million for new freight locomotives and box, flat, and gondola cars, the S.P. said. It denied the association's claim that the road is failing "by a wide margin" to provide an adequate supply of empty cars for loading lumber and forest products in northern California and western Oregon.

The lumbermen's association asked the commission to investigate car service and car distribution on the S.P., and charged that the road with an "inordinate reliance" on foreign-line-owned cars for loading traffic originated by it. The petition said the shortage of cars for loading lumber has existed for 45 years, and has been particularly bad for the past three years. (See *Railway Age* of November 18, page 68.)

The S.P. reply said the recent shortages are the first of any consequence since 1922-23. It added that the shortages were due to causes beyond its control, "none of which could reasonably have been anticipated, prevented or avoided."

These shortages have been caused in part, the road said, by industrial development in areas served by it. This development has caused an "unexpected, general and staggering increase" in postwar freight traffic.

Southern Brakeman Gets Medal of Honor

James E. Dowell, a brakeman employed by the Southern, was awarded a medal of honor by President Truman on October 7. The award was announced by the Interstate Commerce Commission in a November 21 statement which said it was based on Mr. Dowell's rescue of a 16-months-old child from the track immediately ahead of an approaching train, near St. Charles, Va., on July 10.

The award was made upon recommendation of the Committee on Award of Medals of Honor, which recommendation was approved by the commission. The committee and commission acted pursuant to the Act of Congress of February 23, 1905, which provides for the award of bronze medals of honor in recognition of outstanding feats of heroism connected with saving of life upon railroads.

Mr. Dowell's medal was the 63rd awarded under the act. The application for it was filed by D. W. Brosnan, general manager of the Southern at Knoxville, Tenn.; and the Committee of Award found, the I.C.C. announcement said, that "in accomplishing this rescue, Mr. Dowell exhibited extreme daring and greatly endangered his own life." The announcement described the rescue as follows:

"About 10 o'clock on the morning of July 10, while a switching train was moving from Monarch Mines toward St. Charles at a speed of about 15 m.p.h., three railroad employees who were on the train saw a small child, James Woodward, on the track only a short distance ahead. Brakeman Dowell realized at once that the train could not be stopped short of the child; he jumped off the train, ran ahead and lifted the child off the track just in time to prevent it from being struck. At that time the speed of the train was about 8 m.p.h., and except for Brakeman Dowell's timely and courageous action the child undoubtedly would have been killed."

Truman Reappoints Cross, Rogers to the I.C.C.

President Truman on December 7 sent to the Senate his nominations of Interstate Commerce Commissioners John L. Rogers and Hugh W. Cross for new seven-year terms expiring December 31, 1957. Their present terms expire at the end of this month.

The Senate committee on interstate and foreign commerce voted on December 13 to report the Cross nomination favorably to the Senate. The committee had not considered the Rogers nomination when this issue went to press.

A former director of the commission's Bureau of Motor Carriers, Mr. Rogers has been a commissioner since 1937. He served during 1945 as the commission's chairman. Mr. Cross is a former lieutenant governor of Illinois. He has been a member of the commission since April, 1949, when he succeeded the late George M. Barnard.

Railway Criticism in Brazil

Brazilian railway passengers who don't like their government operated service evidently believe in direct and immediate criticism—even to the point of wrecking stations and rolling stock and taking personal vengeance on negligent employees.

It all began, according to a recent newspaper report, when an overcrowded Central do Brasil electric commuter train bound for Rio de Janeiro was halted for two hours by a short circuit at suburban Ricardo de Albuquerque. When railway personnel failed to give any explanation of the delay, or of its probable duration, passengers began to shout criticism of the railway administration and to throw stones at the station building. While those manifestations of impatience were taking place, a diesel locomotive, called to the relief of the stalled train, crashed at full speed into it, killing four passengers and injuring about 100, 30 of them critically.

Then the remaining passengers became what might be termed severely critical. They stormed, wrecked and finally burned the Ricardo station; wrecked the diesel locomotive and all cars of the electric train; and wrecked and looted a freight train which had arrived in the meantime. To underline their critical attitude, the passengers manhandled the Ricardo stationmaster, and chased the engineman of the diesel about three miles to Anchieta, where they caught him, inflicting serious injuries. They damaged the station there, also, just by way of emphasis.

The informal critique of railway service was finally halted by arrival of army units.

Scott Reappointed To Mediation Board

President Truman on December 6 sent to the Senate his nomination of John Thad Scott, Jr., for reappointment to the National Mediation Board for a new three-year term expiring February 1, 1954.

Mr. Scott's present term expires February 1, 1951. He has been a member

WILLIAM REID (right), president of the Hudson & Manhattan, watches as towerman Michael Kilmartin sets up a train route on the control board of the road's new interlocking plant. The board is two floors below street level at Hudson Terminal. Details about its installation and operation are described below

of N.M.B. since April, 1948, and is the board's chairman for the current fiscal year ending June 30, 1951. On December 12, the Senate committee on labor and public welfare reported the nomination favorably to the Senate. The Senate confirmed it the following day.

H. & M. Inaugurates New Interlocking Plant

The Hudson & Manhattan has announced completion of a $270,000 interlocking plant, engineered and manufactured by the Union Switch & Signal Co., which enables one man at Hudson Terminal, New York, to control all train movements between that terminal and points beyond Exchange Place, Jersey City, N. J. The operator at the control point, by pushing one button, can set up a chain of electronic relays which will automatically route a train from the terminal to Exchange Place and then north or west onto tracks leading to its destination.

At the control point, the new plant also automatically identifies all trains from the time they enter the interlocking system until they leave it. As trains from Hoboken, N. J., Journal Square or Newark approach Exchange Place, at the western end of the interlocking plant, a line of light appears on that portion of the control board map which corresponds to tracks over which they are passing. Hoboken trains show up as lines of green light, while Journal Square and Newark trains are identified by red light. Thus the operator knows where each train comes from as soon as it enters interlocking territory. Trains approaching Exchange Place from Journal Square, Newark and Hoboken can be routed into Hudson Terminal, out again, and back through Exchange Place by pushing three buttons on the control board. The interlocking system previously used required an average of eight manual operations for this routing.

The new plant was installed by the road's signal department, under supervision of Tyler K. Slawson, assistant electrical engineer. Like the rest of the H. & M.'s signal system, it is so engineered that if a signal fails, if a switch does not operate, or if anything else goes wrong, trains approaching the site of the defect are automatically signaled to a stop.

Union Shop, Check-Off Bill Passed by Senate

The Senate on December 11 passed S.3295, a bill which would amend the Railway Labor Act to authorize the inclusion in labor-management agreements of provisions for a union shop and check-off of union dues. A similar House bill, H.R.7789, has been reported favorably from that body's committee on interstate and foreign commerce and is pending before the rules committee.

Before passing S.3295, the Senate adopted an amendment stipulating that no union-shop agreement could require an employee to join a second union if he is already a member of one which is national in scope and organized in accordance with the act. This had the effect of making the bill satisfactory to all operating brotherhoods except the Brotherhood of Locomotive Engineers. The latter remains opposed to the proposed legislation.

Meanwhile, the Senate rejected an anti-discrimination amendment and another which would have made union-shop agreements ineffective in states which have laws banning union security provisions from labor-management pacts. The defeated amendments were proposed, respectively, by Senator Jenner, Republican of Indiana, and Senator Holland, Democrat of Florida.

House Favors Separating Subsidies from Air-Mail Pay

The House on December 11 passed a bill to provide for the separation of subsidies from air-mail pay in government payments to air lines. The bill, H.R.9184, was introduced by Representative Heselton, Republican of Massachusetts.

Splawn Will Be I.C.C. Chairman for 1951

Interstate Commerce Commissioner Walter M. W. Splawn has been chosen by the commission as its chairman for the year 1951. He will succeed Commissioner J. Monroe Johnson, who will continue as a member of the commission.

Commissioner Splawn has been a member of the I.C.C. since 1934, and previously served as its chairman during 1938. His present term as commissioner will expire December 31, 1954.

Cooperation Urged on Crossing Protection Costs

Many railway-highway crossings could be made safer if railroad, highway, county and city officials cooperated more closely in determining the fair proportion of costs that should be paid by each, Walker Paul, assistant to chief engineer of the Southern Pacific, told the legal affairs committee of the American Association of Highway Officials at its annual meeting in Miami, Fla., on December 5.

Nowadays, he said, there is great agitation for separation of grades, to avoid economic loss in vehicular movements. There is also demand for new grade crossings, while hazards at such crossings have been increased by the greater number of motor vehicles using them and by increased train and highway vehicle speeds. Where crossings are improved, it is the motorist who obtains the greater benefit, Mr. Paul asserted, from the standpoint both of safety and of delays eliminated. He quoted U. S. Supreme Court Justice Brandeis as being among the first to recognize that the larger part of the cost of grade separations should be assumed by users of highways, because motor vehicles have created most of the increased hazards at crossings, and reminded the committee that the Federal Highway Act of 1944 set up a formula under which the total contribution by railroads in such projects is limited to 10 per cent. Local highway departments, however, usually try to divide costs on a 50-50 basis and ask the railroad to

assume subsequent maintenance expense of signals, even though the major portion of such maintenance may be caused by automobiles or trucks running into the signals, the S. P. officer declared.

The ability of a railroad to pay part of the costs of highway crossing elimination or improved protection, Mr. Paul asserted, is based solely on what it earns from transportation, more and more of which is being taken from it by highway vehicles. On the other hand, the increased need for protection, due to the increased number of highway vehicles, raises the ability as well as the obligation of public bodies to pay a greater part of the cost, because each vehicle contributes gasoline and other taxes.

Before any highway department draws plans for a railway crossing or crossing separation project, it should bring the railroad in as a fully informed partner, Mr. Paul suggested. "Fundamentally, we are all working for stockholders, the railroads directly and the highway departments indirectly being responsible to the taxpayers. It is incumbent upon both to conserve the stockholders' finances and to construct and maintain railroads and highways in the most efficient manner."

He said that in some cases hazards can be lessened by synchronizing neighboring highway signals and railroad crossing signals; and suggested adoption of uniform agreements to speed and clarify mutual business of railroads and highway departments, urging that all possible field studies be exhausted before resorting to law to settle differences.

Eastern Roads Modify Rate-Increase Proposal

Eastern railroads this week modified their recent petition for increased freight rates by withdrawing proposed increases on traffic moving "via" Official territory, with the exception of that moving between Canada and Southern or Western territories.

A letter filed with the Interstate Commerce Commission by Edward A. Kier, general attorney of the Pennsylvania, explained that the Eastern roads desired to "clarify" their December 1 petition. That petition asked commission approval of a general 4 per cent rate increase on freight moving "within, to, from, and via" Official territory. (See *Railway Age* of December 9, page 52). At the time this issue went to press, the commission had as yet instituted no proceeding in connection with the proposed increases.

In addition to removing "through" traffic from the Eastern roads' proposal, the letter also explained that the 4 per cent increase would not apply between points in other territories and border points on Official territory—for example, from points in the South to Cincinnati, Ohio, or Louisville, Ky.

As to freight moving from or to Official territory from other territories, Mr. Kier said it was assumed that the proposed increases would be shared by lines in other territories, but the letter went on to suggest that the commission was of course not precluded from finding that the entire amount of such increases should accrue to the Eastern roads.

The letter noted that inland barge lines and coastwise water carriers that participate in joint through rates with the Eastern roads are expected to request similar increases in their rates. In this connection the commission already has received a joint petition from Newtex Steamship Corporation, Pan-Atlantic Steamship Corporation, and Seatrain Lines. These are coastwise carriers serving Atlantic and Gulf coast ports.

The petition asked the commission to authorize these lines to increase their port-to-port rates, their proportional rates and charges, and their joint through rates in which they participate with other carriers.

A.C.F. Berwick Plant Gets State Safety Award

A plant-wide ceremony honoring employees of the American Car & Foundry Co. at Berwick, Pa., for establishing an all-time state record of more than 3,000,000 man-hours worked without a lost-time accident was held on December 14. Pennsylvania's Governor James H. Duff presented the award of honor to C. J. Hardy, Jr., president of A.C.F., at ceremonies on the plant grounds. The award was in the form of a special citation from the Pennsylvania Department of Labor. Following the presentation an informal dinner was held at the plant dining room honoring the supervisory force that made the safety record possible.

Forest H. Humphreys, supervisor of safety for all A.C.F. plants, was in charge of programming. He was assisted by co-chairman Russell Crosby, supervisor of safety; M. L. Keyser, personnel director, and Glen Nelson, all of the Berwick supervisory staff.

Effect of Proposed Class Rate Scales Estimated

The Interstate Commerce Commission's Bureau of Transport Economics and Statistics has issued a statement setting forth estimates of the revenue effects of the various class rate scales proposed for application in the general class-rate case, which is docketed as No. 28300. The statement, No. 5061, was prepared by Mrs. Wilma Dalton, under supervision of Dr. Beatrice Aitchison.

The estimates indicate that class-rate carload traffic, under the proposed scales, would produce annual revenue ranging from $216.4 million to $278.6 million. The comparable yield from present rates is $228.6 million. The estimates were based on the 1949 traffic pattern as reflected in the one percent sample of audited carload waybills being collected by the commission.

As to l.c.l. traffic, the estimates indicated an annual yield ranging from $368 million to $468 million. The comparable yield under present rates is $396 million. These figures were

News Briefs . . .

. . . Uranium ore deposits have been discovered on lands owned by the Atchison, Topeka & Santa Fe, 65 miles east of Gallup, N. M., Fred Gurley, president of the Santa Fe, announced on December 14. The depth of the deposits is unknown, but the road is undertaking checkerboard drilling tests on 90 acres. Results of these tests may be known in 3 months.

. . . Governor Karl L. Kennedy, of Kansas, in commenting recently on damage done to highways of that state by heavy-hauling commercial trucks, said: "Kansas is now collecting around $8,000 per month from motor fuels tax from these trucks. That runs around $100,000 a year, or about enough to pave (without grading or bridges) two miles of highway."

. . . The Missouri Pacific has inaugurated a new coordinated rail-truck service which will insure early first morning delivery of merchandise freight at points between St. Louis, Mo., and Poplar Bluff, Charleston, and Jefferson City. This service will be operated daily except Saturdays, Sundays and holidays.

. . . Six new Teletype stations were added to the Western Pacific's network on November 20: Seattle, Wash., Portland, Ore., Klamath Falls, San Jose, Cal., Fresno and Los Angeles. These new stations comprise a north-south chain. The east-west chain of the network already stretches from San Francisco, Cal., to New York and links all W.P. traffic agencies in between. Complete reports of all cars in transit over the W.P. will be broadcast over the entire network from San Francisco. Automatic tape transmitters are used, handling more than 60 words a minute, to give shippers and consignees immediate reports of train consists, arrival and departure times, etc.

. . . Streamliner service between Chicago and Florida was doubled commencing December 14 when the "City of Miami," the "Dixie Flagler" and the "South Wind" each began running two days out of three. In the past each train had made one trip every third day. The "Royal Palm," winter-season streamliner between Great Lakes-Midwest cities and the east coast of Florida, also returned to service on December 14 with new luxury coaches, all-room sleeping cars, and an observation-lounge car for sleeping car passengers.

taken from the record in No. 29556, Charges on Small Shipments by Railroads. It was pointed out that they overstate the prospective yields because they include all l.c.l. (class rate and other than class rate); and they cover traffic in all territories, including Mountain Pacific, which is not embraced in the 28300 proceeding.

Six proposed scales are included in tabulations setting forth the estimates. The estimated annual yields from carload and l.c.l. traffic, respectively, under each of the scales are as follows: The so-called Appendix A scale proposed by the commission in its notice of November 28, 1949, $218,019,600 and $374,583,400; Eastern Railroads Scale, $216,362,900 and $368,019,600; Southern Railroads Scale, $219,551,700 and $376,261,500; Western Railroads "Basic" Scale, $241,370,200 and $404,980,700; Western Railroads "Zone A" Scale, $278,565,900 and $468,079,400; scale proposed by the Stanley Works of New Britain, Conn., $219,127,200 and $370,646,900.

House Group Probes Long Island Accident

The November 22 accident on the Long Island at Kew Gardens, N. Y., in which 78 persons were killed and 203 injured, may have been caused when the motorman on the rear train accepted as his own a clear signal displayed for the preceding train, while failing to see, until too late, the rear lights on that train.

This view was expressed this week by Interstate Commerce Commissioner William J. Patterson at a hearing before the House Committee on Interstate and Foreign Commerce. Replying to questions from Representative Hall, Republican of New York, Commissioner Patterson said this was one "plausible" theory that has been advanced as to the cause of the tragedy.

The commissioner, who investigated the accident for the I.C.C., indicated that, having seen this clear signal, the motorman then increased the speed of his train. This would account for the speed at which the second train was moving, estimated at about 35 miles per hour, when it plowed into the rear end of No. 780. The motorman, Benjamin J. Pokorny, was among those killed in the accident. (See *Railway Age* of December 2, page 72-73.)

Commissioner Patterson appeared before the House committee at a special hearing called by that group to study the Long Island situation. As explained by Representative Beckworth, Democrat of Texas, the committee wanted to know "whether everything is being done that can be done to prevent another catastrophe." Another accident on the Long Island occurred at Rockville Center last February 17, in which 31 were killed and 158 injured.

Discussing the November 22 accident, the commissioner said it was the result of a human failure "to the extent that the motorman exceeded 15 miles per hour and to the extent he did not stop his train before the impact." The second train (No. 174) apparently entered the block in which the accident occurred through a "stop and proceed" signal—an indication requiring any following train to stop and then proceed at not more than 15 m.p.h. Witnesses at the I.C.C. hearing in New York testified that No. 174 did stop; but as it proceeded it accelerated to a speed considerably in excess of 15 m.p.h.

The commissioner told the committee that his report on the I.C.C. investigation of the accident would be forthcoming "in about ten days." He said he planned to recommend that an investigation be made of the "whole Long Island signal set-up," but added that it would be up to the commission to decide whether it should institute a full-scale investigation.

"This road had a pretty good record up to the last two years," Commissioner Patterson said. He said that as far as he knew the Long Island has not been violating the commission's signaling rules, and told the committee that no general investigation of the road's safety devices was undertaken after the Rockville Center accident because the road appeared to be observing all the rules and regulations of the I.C.C. that were in effect at that time. The commission has since prescribed new signaling rules which became effective October 1.

Representative Hall, who represents the home district of many of those who were killed or injured in the November 22 accident, questioned Commissioner Patterson at length on why the I.C.C. has not already begun an investigation of safety on the Long Island. The commissioner replied that the commission has neither the staff nor the funds, nor can it afford to give the Long Island "preferential treatment."

"The emphasis should not be on the Long Island alone," he said. "We want to raise the general level of safety on all the roads." He told the group he did not know of any safety device that would have prevented the November 22 collision, although some, such as speed control devices, "might have mitigated the effects."

I.C.C. Orders Increase In N. H. Commuter Fares

Following through from the recent report wherein it announced that it would act if the Public Service Commission of New York failed to do so, the Interstate Commerce Commission has ordered the New York, New Haven & Hartford to increase its intrastate commutation fares in the New York City area on or before February 1, 1951. The I.C.C. order, dated December 12, also denied a petition whereby the New York commission had sought reconsideration of the case.

The case is docketed as No. 30010, and the I.C.C.'s report was issued October 9. It advised that an "appropriate order" would be entered unless the New York commission authorized the increase within 60 days. The commutation fares involved are those between New York City and New Haven stations in Westchester county. (See *Railway Age* of October 21, page 51.)

Pension-Act Liberalizer Planned by the R.L.E.A.

G. E. Leighty, chairman of the Railway Labor Executives Association, announced last week that a bill to increase benefits under the Railway Retirement Act will be ready to introduce as soon as the next Congress convenes in January. The announcement was made in the December 9 issue of "Labor."

It quoted Mr. Leighty as saying that "we want to improve the benefits all we can without increasing the tax rate."

Locomotive Maintenance Officers Discuss Problems

Representatives of 15 railroads from all sections of the country, including both coasts, attended an executive committee meeting of the Locomotive Maintenance Officers' Association in Chicago on December 7 to discuss the most troublesome diesel locomotive problems of today from a list of 150 suggested topics.

These problems, broken down into eight classifications, will be discussed at various diesel clubs meeting during the remainder of this year, and will be reported on at next year's annual L.M.O.A. meeting on September 17, 18 and 19.

The eight topic classifications include: Diesel electrical, diesel mechanical, other diesel maintenance, shop tools, shop practices, personnel training, terminal facilities and material reclamation.

Locomotives for Water-Supply Tunnel

Electrified equipment is helping to bore 25 miles through the Catskill Mountains to add 300 million gallons of water to New York City's water supply. The extension of the Delaware Aqueduct is being built by the Walsh Construction Company and B. Perini & Sons, with electrical equipment coordinated and engineered by the General Electric Company.

For the first time in tunnel construction history, tube rectifiers are being used for locomotive power. D.c. conversion equipment was required to supply power for trolley operation of locomotives used to remove excavated material. Overall dimensions of the equipment are an important factor, since it is necessary to excavate a space in the tunnel wall to mount the equipment. Upon completion of the work, this space has to be filled in with concrete.

Fourteen trolley-battery, nine-ton, 275-volt d.c. combination locomotives have also been purchased. Trolley power will be used to within approximately 1,000 ft. of the working area, when power will be provided by batteries. The trolley-battery locomotives are 56½ in. wide, 61½ in. high and 150 in. long. These small dimensions are necessary because of the physical limitations of the tunnel, which is only 11 ft., 4 in. in finished diameter.

G.E. also supplied two automatic battery charging equipments for use with the battery locomotives which were first put in service at the tunnel. Each consisted of a d.c. generator and multi-circuit charging panels.

A.R.E.A. Pictorial Exhibit Available in Slide Form

So that they may be shown before interested groups, such as students of engineering and members of engineering societies, the National Railway Appliances Association has had slides made of the photographic exhibit of engineering progress that was displayed at the 1949 convention of the American Railway Engineering Association. Preparation of this exhibit was a cooperative venture between the A.R.E.A. and the N.R.A.A. Its purpose was to illustrate 50 years of progress in railway tracks and structures, and in equipment and practices used in maintaining them.

The original exhibit was comprised of 48 panels, two of which consisted of photographs of past presidents of the A.R.E.A. Thus, there are 48 slides in the set, and to accompany them a brief commentary describing each panel has been prepared. Requests for slides and commentary should be addressed to Lewis Thomas, assistant secretary, N.R.A.A., 59 E. Van Buren street, Chicago 5.

Milwaukee Harbor Found Due More Rail Service

Acting on a complaint filed by the City of Milwaukee, Wis., the I.C.C. has found that proper development of the city's south harbor terminal requires that two railroads have access to the area.

The commission overruled objections by the Chicago & North Western in finding that the Chicago, Milwaukee, St. Paul & Pacific should be permitted to extend its so-called Bay View spur tracks across the North Western's right-of-way to give the Milwaukee access to the harbor terminal area. The commission report said the North Western has served the harbor terminal since 1928, and although the Milwaukee indicated a willingness to serve the area also, the former road had refused to grant permission for the latter to cross its tracks and obtain entry.

The city's complaint, according to the commission, alleged that adequate transportation was not being provided in the terminal area. The city claimed that there was undue and unreasonable delay in delivery and switching, and that the North Western was not providing proper and equal facilities for interchange of traffic destined for movement over the Milwaukee.

The city agreed to construct a service track of approximately 2,400 ft. to connect with the Milwaukee crossover.

CHRISTMAS IN MANY LANDS is the theme of this year's decoration of the Canadian National Central station in Montreal, Que. The main display depicts a scene in an average North American home on Christmas eve. There are also scenes depicting Yuletide celebrations in the British Isles, France, Latin America, the Netherlands, Italy and the Scandinavian countries. Special lighting and music have been arranged on a rotating system to synchronize with the featuring of the various displays. All decorations were designed and constructed under supervision of A. L. Sauviat, administrative assistant to the director of public relations

Northern Rail Lines Aid Defense, Dingle Says

The strategic value to the security of North America of Canadian railway lines which extend into the sparsely populated regions of the far north was emphasized by Stanley F. Dingle, vice-president, operation, of the Canadian National, to the New England Railroad Club at its annual "Canadian night" meeting in Boston, Mass., on December 12.

"All values," Mr. Dingle declared, "are not metallic and there is profit in how securely men sleep at night . . . . There are men in the Pentagon, in Ottawa and Whitehall, who, looking at a map of this continent, are thanking God" that that map shows the C.N. lines to Churchill, Man., on Hudson bay, and Prince Rupert, B. C., "at the gateway to southwestern Alaska." These far northern territories, he added, are the least understood and most incompletely appreciated areas of the continent; they have potentialities and national and continental significance which have been obscured partly by events and partly by lack of popular understanding.

Canadian and American railroads, Mr. Dingle also said, have much in common. "We get plenty of abuse and plenty of blame. If that were all, it wouldn't matter very much. We know that the nation can't get along without us and at times the people take the trouble to tell us so. We get bouquets as well as brickbats. What makes it tough is that the people don't always act as if we were a vital service. They don't always seem to see that we need a fair wage for the work we do . . . . Like you we have to meet competition from trucks and buses, airplanes and other forms of transportation."

Railroads in the United States, he continued, "have done better with freight rate increases to meet increased expenses than we have . . . . Competition is all right. When it is fair. Our trouble is that, while railroads are regulated by federal authority, trucks, for example, are a provincial affair. We are hoping for uniform country-wide regulation, and have asked the Royal Commission on Transportation to take some action in its recommendations to the government . . . We feel handicapped because in Canada we have n national transportation policy."

Mather Asks "Fair Field" for Railways

"Understanding of the magnitude of the service to the nation in the past and now, and a fair field for every form of transportation, are all the railways ask," W. A. Mather, president of the Canadian Pacific, said in a December 12 address to the Canadian Railway Club at Montreal, Que. "Given these," he added, "there is nothing in the future to stand in the way of our providing Canada with the best rail-

STEAM LOCOMOTIVES—and "Armstrong" turntables—still have a place in railroading. This picture shows one of each in action at Irondale, Ont., on the Lindsay-Bancroft branch of the Canadian National

way facilities to be found anywhere."

The C.P. president told his railroad audience that the future holds for them a number of challenges, one of which "is to continue improving our services and at the same time keep our costs down to an economic level." And he left with the audience "an unanswered question: What happens when a competitor comes along and either takes away the high-rated traffic or forces you to reduce your rate on that traffic, leaving you bearing the burden of the low-rated haulage because he cannot possibly get his rates down to the rail level of rates on that traffic? Is it too much to suggest that the shipping and consuming public, who are getting the benefit of better and relatively cheaper transportation on their finished products and high valued commodities, can well afford higher rates on low-value commodities?"

Competing forms of transportation, Mr. Mather noted, have introduced "confusing complexities into the overall economics of transportation" which "in some important respects, touch upon public or governmental policy." He likewise called attention to numerous improvements in railway service, but pointed out that "these mean money — a great deal of it. It can come from one of two sources — investors or the users of railways."

Waybill Studies

Three additional waybills studies have been issued recently by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. They are:

Statement No. 5047, Traffic and Revenue in the Manufactures and Miscellaneous Group (Part II), by Commodity Class, Territorial Movement, Length of Haul (Short-Line), and Type of Rate—All Terminations in 1949.

Statement No. 5048, Traffic and Revenue in the Manufactures and Miscellaneous Group (Part III), by Commodity Class, Territorial Movement, Length of Haul (Short-Line), and Type of Rate—All Terminations in 1949.

Statement No. 5058, Distribution of Number of Carloads by Weight Brackets for Each Commodity Class by Type of Car—Terminations in 1949.

Tennessee Rates

The Interstate Commerce Commission has instituted an investigation to determine whether undue discrimination against interstate commerce has resulted from refusal of the Public Utilities Commission of Tennessee to authorize intrastate rate increases in line with interstate adjustments approved in Ex Parte 166 and Ex Parte 168. The proceeding, docketed as No. 30720, was instituted in response to a petition filed by railroads operating in Tennessee.

Freight Car Loadings

Loadings of revenue freight in the week ended December 9 totaled 766,743 cars, the Association of American Railroads announced on December 14. This ws an increase of 26,821 cars, or 3.6 per cent, compared with the previous week; an increase of 97,918 cars, or 14.6 per cent, compared with the corresponding week last year; and a decrease of 16,170 cars, or 2.1 per cent, compared with the equivalent 1948 week.

Loadings of revenue freight for the week ended December 2 totaled 739,922 cars; the summary for that week, as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, December 2

District	1950	1949	1948
Eastern	119,343	121,523	148,493
Allegheny	116,232	133,083	165,118
Pocahontas	54,106	47,412	63,584
Southern	134,521	121,379	129,512
Northwestern	108,113	83,789	100,155
Central Western	139,686	121,642	128,503
Southwestern	67,921	65,095	68,807
Total Western Districts	315,720	270,526	297,465
Total All Roads	739,922	693,923	804,172
Commodities:			
Grain and grain products	55,019	49,251	54,044
Livestock	11,809	11,989	14,174
Coal	132,607	139,443	163,069
Coke	11,931	12,096	14,962
Forest products	47,014	41,010	40,524
Ore	34,589	19,508	31,263
Merchandise l.c.l.	79,378	83,827	102,034
Miscellaneous	367,575	336,799	384,111
December 2	739,922	693,923	804,172
November 25	701,421	664,555	722,936
November 18	837,065	758,972	858,089
November 11	839,612	635,823	871,679
November 4	862,184	578,981	843,586
Cumulative total 48 weeks	36,010,298	33,483,811	39,988,054

In Canada.—Car loadings for the week ended December 2 totaled 81,434 cars, compared with 82,333 cars for the previous week, and 77,683 cars for the corresponding week last year, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
December 2, 1950	81,434	32,806
December 3, 1949	77,683	30,072
Cumulative totals for Canada:		
December 2, 1950	3,618,555	1,514,692
December 3, 1949	3,644,960	1,481,832

October Truck Traffic

Motor carriers reporting to the American Trucking Associations transported in October 4,515,214 tons of freight, an increase of 3.9 per cent over the previous month's total of 4,345,830 tons, and an increase of 28.1 per cent above the 3,523,795 tons transported in October, 1949. The figures, according to the A.T.A., are based on comparable reports from 286 truckers in 42 states.

Alco Gets Order For 500 Tanks

The American Locomotive Company has received an army ordnance contract to manufacture 500 medium tanks costing approximately $100,000,000, it has been announced by the Department of the Army. The company, the announcement said, has been requested to begin production at the earliest possible date.

I.C.C. Will Hold Hearing On "Jim Crow" Complaint

The Interstate Commerce Commission will hold public hearings in New York City on January 24, 1951, in connection with the racial discrimination complaint filed recently by Lillie Perez.

The complaint, which is directed against the Pennsylvania and the Sea-

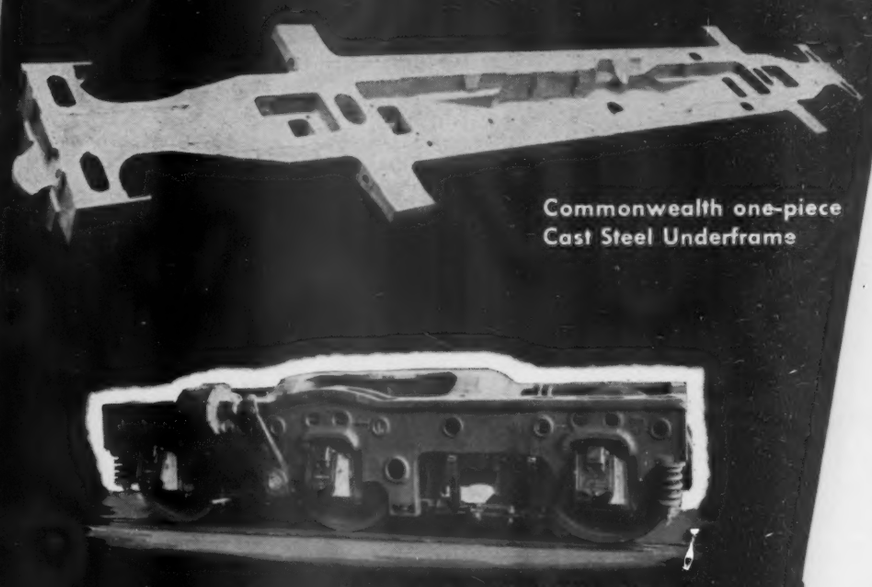
(Continued on page 61)

COMMONWEALTH

CAST STEEL UNDERFRAMES

AND MOTOR TRUCKS

For Diesel Locomotives

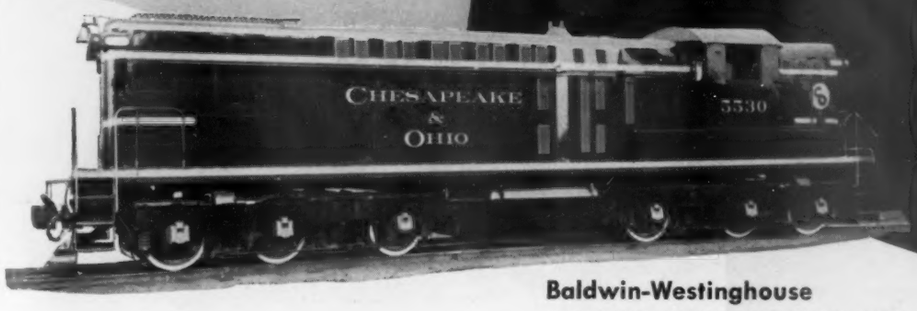


Commonwealth one-piece
Cast Steel Underframe

Commonwealth 6-Wheel Truck
Arranged With Three Traction Motors

Assure

- Great Strength
- Low Upkeep Cost
- Dependable Performance



Baldwin-Westinghouse
1500 H. P. Diesel Road Switcher

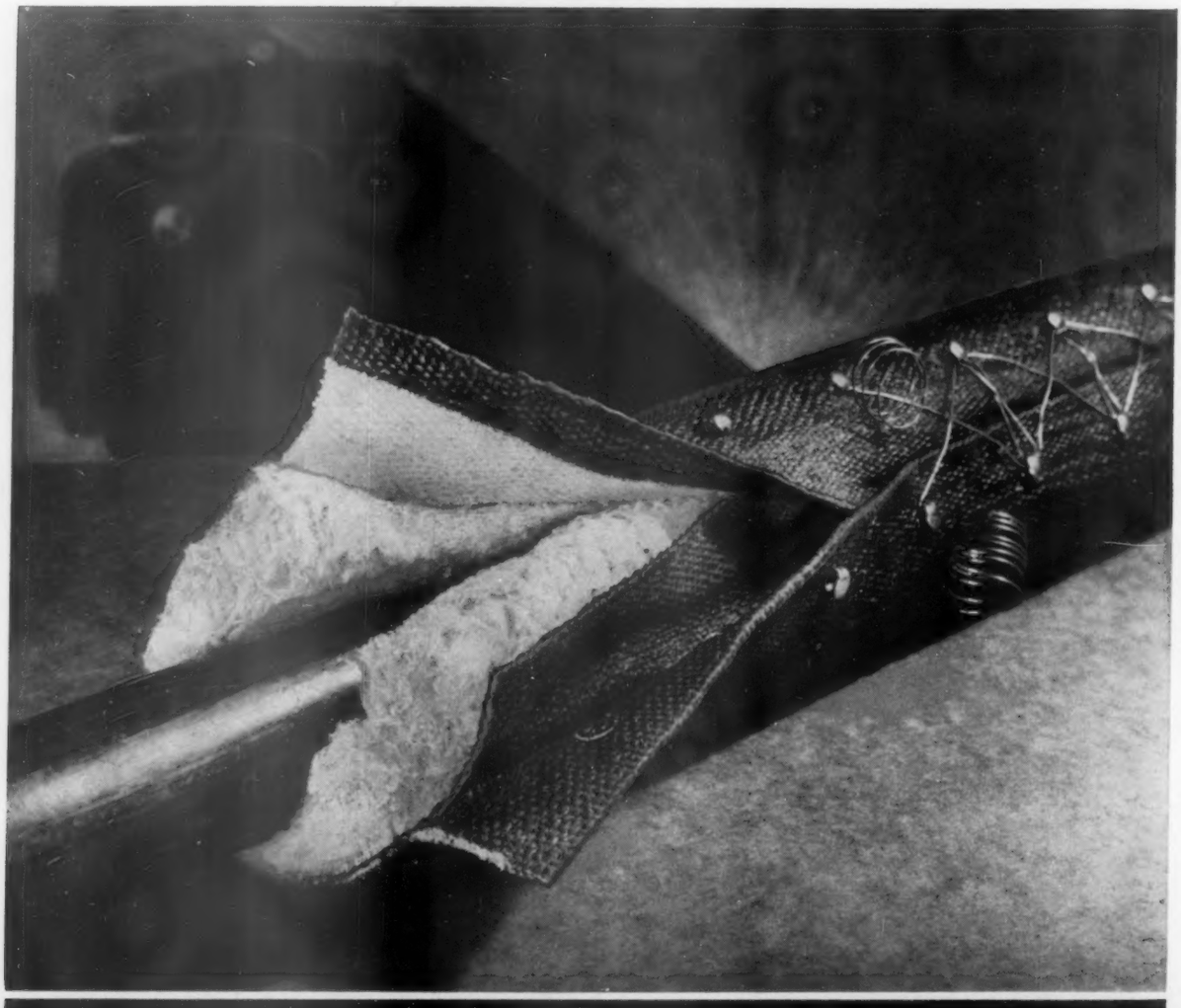
For every type of Diesel—passenger, freight or switcher—COMMONWEALTH trucks for many years have proven their outstanding dependability and maintenance economy. They provide minimum weight with exceptional strength.

The one-piece cast steel construction of COMMONWEALTH underframes provides great inherent strength and permanent durability to withstand the severe shocks of switching and road service. They are furnished completely machined and ready for application, increasing production output. In the event of collisions, damage to power plants is greatly minimized.

COMMONWEALTH UNDERFRAMES and TRUCKS provide maximum availability for your Diesel power.

GENERAL STEEL CASTINGS

GRANITE CITY, ILL. EDDYSTONE, PA.



UNARCO WOVENSTONE®

Lace-on Train Pipe Insulation

Contributing to passenger comfort on the nation's trains for more than 25 years—Wovenstone is recognized for its high insulating efficiency, rugged construction and long life. These qualities are reflected in the lower cost of delivering steam heat and hot water to the cars. The longer the train, the greater the need for Wovenstone.

UNARCO

UNION ASBESTOS & RUBBER COMPANY

332 SOUTH MICHIGAN AVENUE • CHICAGO 4, ILLINOIS

Car Surpluses and Shortages

Average daily freight car surpluses and shortages for the week ended December 9 were announced by the Association of American Railroads on December 14, as follows:

	Surplus	Shortage
Plain Box	1,273	7,393
Auto Box	65	35
Total Box	1,338	7,428
Gondola	693	2,686
Hopper	360	1,260
Covered Hopper	35	80
Stock	1,041	45
Flat	115115	356
Refrigerator	3,578	0
Other	451	273
	7,611	12,123

(Continued from page 58)
board Air Line, alleges that these roads violate the Interstate Commerce Act by practicing racial segregation on their joint through train, the "Silver Meteor," between New York and Tampa, Fla. (See *Railway Age* of September 23, page 42.)

The New York hearings will be conducted by I.C.C. Examiner E. L. Boisseree.

U. S. Chamber Will Hold Regional Meetings

Fred G. Gurley, president of the Atchison, Topeka & Santa Fe, and James K. Knudson, administrator of the Defense Transport Administration, are scheduled to address a transportation conference sponsored by the Chamber of Commerce of the United States at Oklahoma City, Okla., on January 19 and 20, 1951. The conference will be the first of a series of regional meetings, according to a December 13 announcement from the chamber.

Other speakers will include D. P. Loomis, chairman of the Association of Western Railways; George H. Shafer, general traffic manager of the Weyerhaeuser Sales Company, St. Paul, Minn.; D. W. Rentzel, chairman of the Civil Aeronautics Board; Charles S. Dearing, of the Brookings Institution; Dr. Sidney L. Miller, Transportation department, University of Pittsburgh; and Harold F. Hammond, manager of the chamber's Transportation and Communication department. Evans A. Nash, of Oklahoma City, who is chairman of the chamber's Committee on Transportation and Communication, will preside.

"The principal purpose of the conference," Mr. Nash said in the December 13 announcement, "is to examine the country's transportation facilities with a view to determining effective ways to develop and assure a stronger and more efficient transportation system to meet the uncertain future."

Representatives to the conference will come from eight states comprising the chamber's Southwestern division; Louisiana, Missouri, Arkansas, Texas, New Mexico, Colorado, Kansas and Oklahoma.

ORGANIZATIONS

RR Presidents to Preside At Historical Sessions

High-ranking railroad officers will play an important role in the mid-winter meeting of the Lexington Group, to be held at the Hotel Stevens, Chicago, on December 30, in conjunction with the annual meeting of the American Historical Association. The luncheon, which is scheduled for 12:30 p.m., will honor the Illinois Central, which is celebrating its centennial in 1951. I. C. President Wayne A. Johnston will preside, and the speaker, Robert M. Sutton of the University of Illinois, will discuss the first federal land grant in his paper, "The Illinois Central and the Southern Connection." Discussion of the paper will be led by Tom Clark, of the University of Kentucky, and Carlton Corliss, the historian of the I. C., will be on hand.

At the morning session, starting at 10 a.m., presided over by L. C. Sprague, president of the Minneapolis & St. Louis, W. G. Rector, of the Forest Products History Foundation, will discuss "Railroad Logging in the Lake States." J. H. Poore, vice-president of the Northern Pacific, will lead the discussion. The second paper of the morning session will be a discussion of "Railroad Administration in World War II," by D. S. Ballantine, of the Massachusetts Institute of Technology. The discussion will be led by Ralph Budd, chairman of the Chicago Transit Authority and former president of the Chicago, Burlington & Quincy.

The **American Association of Railroad Superintendents** will hold its next annual convention in Chicago on June 12, 13, and 14, 1951, it was decided at a meeting of the executive committee in Chicago last week. Plans for the program and entertainment were discussed, resulting in a decision to give increased emphasis to discussion of problems of interest to all superintendents as a contribution toward the national defense effort.

Charles W. Bryan, Jr., president of the Pullman-Standard Car Manufacturing Company, Chicago, has been elected a director of the **American Standards Association** to serve a three-year term beginning January 1, 1951.

The **New York division of Railroad Enthusiasts, Inc.,** will hold its next meeting on December 19, at 7:45 p.m., in the Williamson Library, room 5646, Grand Central Terminal, New York. James Timperley, chief representative of the South African Railways, and C. E. Taylor, advisory engineer of that system, will be the guest speakers.

W. H. S. Stevens, director of the Interstate Commerce Commission's Bureau of Transport Economics and Statistics, delivered an address at the anual dinner of the **Baltimore & Ohio Accounting Association,** which was held December 11 in Baltimore, Md. Dr. Stevens discussed "I.C.C. Statistics and the Importance of their Accuracy."

The 27th annual meeting of the **Atlantic States Shippers Advisory Board** will be held on January 10 and 11, in the Hotel Roosevelt, New York. The guest speaker on the 11th will be W. S. Tower, president of the American Iron & Steel Institute.

The **Railway Business Women's Association of Metropolitan New York** has recently been organized. Gloria Santomauro, of the New York Central, founder and charter member of the New York club, has been elected its first president.

John W. Barriger, III, president of the Chicago, Indianapolis & Louisville; George A. Kelly, vice-president of the Pullman Company; and Leroy Kramer, (retired) of the General American Transportation Corporation, have been elected directors of the **Transportation Association of America.**

OVERSEAS

Asia Development Plan To Cost $5.2 Billion

Expenditure of about $5,200,000,000, approximately 34 per cent of which would be devoted to transport and communications, was forecast in a six-year program for economic development of south and southeast Asia, recently announced by seven countries in the British Commonwealth. The target of the "Colombo plan," as it has come to be known, is to increase land under cultivation in the area by 13 million acres, produce six million more tons of food grains, and increase electric generating capacity by more than one million kilowatts.

Development projects have been blueprinted for India, Pakistan, Ceylon, Malaya, Singapore and British North Borneo, but the plan attaches importance to bringing in other countries of the area and putting the entire program into a world context. Of total planned capital outlay, $2,200,000,000 would be found internally and $3,000,000,000 would have to come from out-

side. Nearly one-fourth the "foreign" capital would be provided in the form of release by the United Kingdom of sterling balances owned by the countries concerned. If the program is to be carried out in full, the cooperation of other governments, the International Bank for Reconstruction and Development and private investors in other countries will be necessary, it is said.

Pakistan.—This country's government has announced plans to spend over 25,000,000 rupees (about $7,806,000), for railway improvement during the next six years, according to Foreign Commerce Weekly. Approximately 1,000 new freight cars, 200 new locomotives, 300 new coaches and 3,000,000 new ties are to be purchased, as well as additional shop machinery.

SUPPLY TRADE

M. G. DeForest, whose appointment as eastern railroads sales representative in the national accounts department of the **Socony-Vacuum Oil Company** was reported in *Railway Age* of November 25, page 58, has been appointed manager of the railroad division—east, with headquarters at 26 Broadway, New York. Mr. DeForest received a B.A. degree from the University of Minnesota, School of Engineering, and represented several engineering firms in New York City until 1933, when he joined Socony-Vacuum in the industrial and commercial fields. In 1937 he became a registered professional engineer qualified for mechanical and structural work, and from 1942 to 1946 served in the United States Army as a lieutenant colonel of engineers. At the end of World War II he returned to Socony-Vacuum and in 1948 was assigned to the railroad division as chief engineer.

J. E. Vaughn, has been appointed vice-president in charge of all sales of the **Standard Railway Equipment Manufacturing Company** and its subsidiaries, with direct supervision over all sales offices. Mr. Vaughn's headquarters will be in Chicago.

The **Optimus Equipment Company,** Matawan, N. J., has purchased the **Circo Products Corporation,** Cleveland, Ohio, which purchase includes, among other things, the trademarks, patents, and sales rights of the Circo corporation. Circo manufacturing operations will be moved to Matawan and will be known as the Circo division of Optimus.

Walter A. McLean has been appointed manager of erection of the **Industrial Brownhoist Corporation,** Bay City, Mich., succeeding the late **John J. Schreck**. Mr. McLean formerly worked in a sales and service capacity at Philadelphia, Pa.

John W. Pennington, formerly staff engineer for the **Caterpillar Tractor Company,** has been appointed chief engineer of the piston ring department of the **Koppers Company.** He will be responsible for design and metallurgy of Koppers American hammered piston rings; all shops and field testing; supervision of research activities; and customer contacts of an engineering nature. Mr. Pennington joined the Caterpillar Tractor Company as a student engineer and, from 1941 to 1946 was a research engineer, specializing on internal combustion engines — lubrication, engine wear, pistons, and piston rings. He was appointed staff engineer in 1946.

William L. Cunningham has been appointed district sales manager of the Bendix Radio division, **Bendix Aviation Corporation,** at Chicago. He succeeds **Robert B. Barnhill,** who has been transferred to Baltimore, Md., to manage the mobile and automotive radio sales department on a national scale. Since 1947, Mr. Cunningham has served as a sales engineer at the Chicago office of Bendix and, prior to that, he was service manager at the main plant in Baltimore. During the war, Mr. Cunningham was granted a leave of absence to go to England, where he assisted the British Air Commission in procurement of electronic equipment.

Robert E. Owen has been appointed district manager in the southwest for **Gar Wood Industries, Inc.,** Wayne, Mich.

EQUIPMENT AND SUPPLIES

FREIGHT CARS

126,870 Freight Cars On Order on December 1

Freight-train cars on order on December 1 totaled 126,870, including 35,358 on order from railroad shops, compared with 122,148 on order on November 1 and 14,146 on December 1, 1949, according to a joint announcement by the American Railway Car Institute and the Association of American Railroads. Freight-train cars ordered in November, the announcement said, numbered 10,573, including 1,000 ordered from railroad shops, compared with October orders for 21,893, which included 4,816 ordered from railroad shops. Deliveries last month totaled 5,791, including 2,439 delivered by railroad shops, compared with October deliveries of 5,501 cars, which included 3,057 delivered by railroad shops. The accompanying table lists by types all cars ordered and delivered in November and those on order on December 1.

Type	Ordered Nov., 1950	Delivered Nov., 1950	On Order Dec. 1, 1950
Box-Auto	——	201	2,019
Box-Plain	4,967	3,479	49,407
Caboose	——	2	442
Flat	50	5	3,936
Gondola	2,534	1,339	29,316
Hopper	655	156	21,436
Covered Hopper	206	203	4,668
Refrigerator	400	28	6,281
Tank	1,761	291	7,865
Other	——	87	1,500
Total	10,573	5,791	126,870

The **Atlantic Coast Line** has ordered 18 dump cars from the Magor Car Corporation.

The **Central of Georgia** has ordered 300 50-ton box cars and 200 50-ton gondola cars from the Pullman-Standard Car Manufacturing Company and 25 70-ton covered hopper cars from the American Car & Foundry Co.

The **Chicago, Indianapolis & Louisville** has ordered 50 50-ton flat cars from the Greenville Steel Car Company.

The **Chicago, Milwaukee, St. Paul & Pacific** has ordered 42 50-ton box cars from the Pullman-Standard Car Manufacturing Company at an estimated cost of $222,000. Delivery is scheduled for the third quarter of 1951.

The **Clinchfield** has ordered 40 70-ton covered hopper cars from the American Car & Foundry Co.

The **Columbia, Newberry & Laurens** has ordered 50 50-ton box cars from the American Car & Foundry Co. at an approximate cost of $300,000. Delivery is scheduled for the third quarter of 1951.

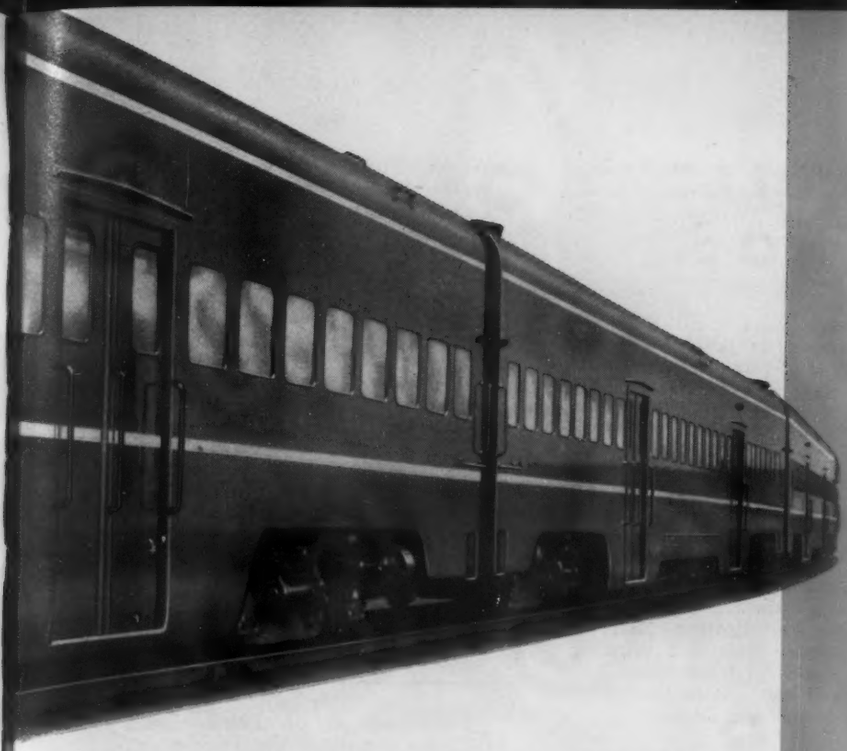
The **Cuyahoga Valley** has ordered 100 70-ton gondola cars from the Magor Car Corporation at an approximate cost of $600,000. Delivery is scheduled for July, 1951.

The **Grand Trunk Western** is inquiring for 500 50-ton box cars, half of which are to be 40½-ft. long and half 50½-ft. long. A report that the road might purchase up to 1,400 freight cars of various types was published in last week's issue, page 63.

The **Illinois Central** has ordered 1,000 50-ton gondola cars from its own shops and nine dump cars from the Magor Car Corporation.

The **Norfolk Southern** has ordered five 70-ton covered cement hopper cars from the American Car & Foundry Co.

The **Seaboard Air Line** has ordered 1,125 freight-train cars costing $6,000,000. Five hundred 50-ton box cars will be built by the Pullman-Standard Car Manufacturing Company; 300 70-ton hopper cars and 300 50-



SAFE SHORT SURE STOPS

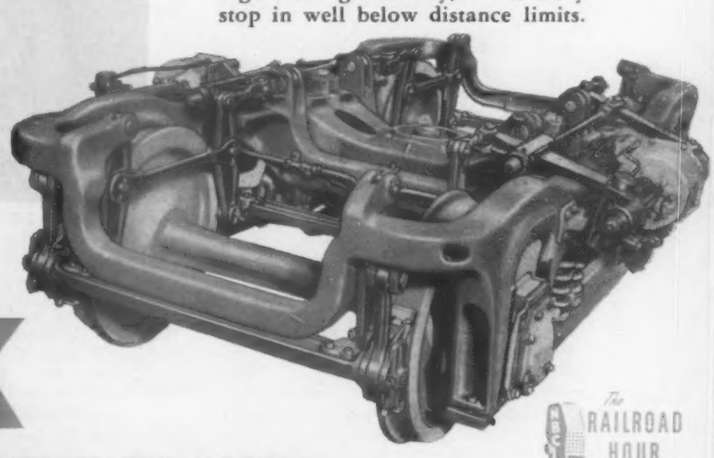
NOTHING FINER CAN BE SAID ABOUT BRAKES

Helps Keep Revenue Rolling Profitably on All Types of Passenger Equipment!

New Commuter Cars on the Rock Island's Chicago Suburban Service (above) are the *last word* in passenger convenience and comfort. The center entrance is normal-step height. Passenger movement from car to car is unobstructed by vestibules. There's fluorescent lighting, and air conditioning or filtered-air ventilation. And *smooth-acting* A.S.F. Simplex Clasp Brakes provide reliable Power to Stop!

In use since November, 1949, this Diesel-powered equipment (there are Simplex Clasp Brakes on the locomotives, too) has operated in snows and icing conditions—*in wet weather and dry*—with unimpaired dependability. On suburban service, as on high-speed Streamliners, Simplex Unit Cylinder Clasp Brakes always mean *year-round* operating efficiency.

● Well over 90% of all passenger cars purchased by U.S. railroads during the past four years are equipped with Simplex Unit Cylinder Clasp Brakes. 250% braking ratio, plus high braking efficiency, makes every stop in well below distance limits.



Streamlined, Lightweight

SIMPLEX

UNIT CYLINDER CLASP BRAKES

"Under Virtually Every Streamliner"

The RAILROAD HOUR
NBC Every Monday Night

AMERICAN STEEL FOUNDRIES

MINT MARK OF FINE CAST STEEL

ton high-side gondola cars by the Bethlehem Steel Company at Sparrows Point, Md.; and 25 cabooses by the road's own shops. Legh R. Powell, Jr., president, said the cabooses will be the first built in Seaboard shops. Their construction, he added, will provide experience for use in considering adoption of a policy of building other types of cars in the shops.

The **St. Louis Southwestern** has ordered 100 50-ton 40½-ft. box cars from the Pullman-Standard Car Manufacturing Company. Contracts also are being negotiated for an additional 100 50-ton 40½-ft. box cars, 75 50-ton 50½-ft. box cars and 75 70-ton covered hopper cars. Deliveries of all these cars are scheduled between June, 1951, and September. The covered hoppers are those the road intends to order from the American Car & Foundry Co., as reported in *Railway Age* of November 4, page 93.

PASSENGER CARS

The **Atlantic Coast Line** has purchased five twin-unit dining cars from the Chesapeake & Ohio at an approximate cost of $1,150,000. Three of the twin-unit cars were built by the Budd Company and two by the Pullman-Standard Car Manufacturing Company. The twin-unit cars, delivery of which is expected this month, will be used on the "West Coast Champion," operating between New York and Florida.

LOCOMOTIVES

The **Missouri-Kansas-Texas** has ordered 11 diesel-electric locomotive units for delivery by July, 1951. Five 2,250-hp. passenger units were ordered from the Electro-Motive Division of General Motors Corporation; four 1,600-hp. road-switching units from Fairbanks, Morse & Co.; and two 1,600-hp. road-switching units from the American Locomotive-General Electric Companies.

The **Texas & Pacific** has been authorized to purchase 34 diesel-electric locomotive units, as follows: Six 3-unit 4,500-hp., four 2-unit 3,000-hp. and one 1,500-hp. freight locomotives; two 1,500-hp. road-switching units and five 1,200-hp. switching units.

COMMUNICATIONS

The **Atlantic Coast Line** has announced plans to widen the scope of its projected use of two-way VHF radio in yards to expedite movement of freight. Radio equipment has been ordered from the Bendix Radio division of the Bendix Aviation Corporation for nine locomotives and for yard offices at Waycross, Ga., to augment earlier orders for equipment to be used in yards at Lakeland, Fla., Tampa, Jacksonville and Florence, S. C.

The **Baltimore & Ohio** has ordered from the Bendix Radio division of the Bendix Aviation Corporation two-way adjacent-channel radio equipment, to be installed on freight trains and in several way stations between Connellsville, Pa., and Fairmont, W. Va. When installed, it will enable wayside operators to talk directly with the crews of moving trains, in addition to providing radio-telephone facilities between cabooses and locomotives of trains.

SIGNALING

The **Chicago Great Western** has ordered from the Union Switch & Signal Co. material to rehabilitate automatic signaling on approximately 53 mi. of single track between McIntire, Iowa, and West Concord, Minn. The order includes style H-2 searchlight signals, relays, transformers, and housings. Field installation will be handled by railroad forces.

CAR SERVICE

I.C.C. Service Order No. 869, effective from December 14 through April 30, 1951, unless otherwise modified, restricts the use of refrigerator or RS-type cars for movements other than perishable freight. These cars may not be used for commodities not listed in Item 1130 of the Perishable Protective Tariff.

Six exceptions are provided, authorizing use of refrigerator cars for the following purposes:

(1) Non-perishable commodities moving westbound under transcontinental tariffs may be loaded in PFE and SFRD cars if destined to south coast points in California; or such commodities may be moved in BRE, FGE, FWD, NP, NRC, PFE, and WFE cars if destined to northern points on the coast.

(2) Railroad freighthouse merchandise (l.c.l.) when moving in the direction of the empty movement to destinations of 1,000 mi. or more; or moving in PFE and SFRD cars when loaded by railroads at Chicago, Ill., and destined to Missouri River points and beyond.

(3) Empty beer containers.

(4) Commodities destined for Mexico when loaded in PFE RS-type refrigerator cars and covered by permits issued under Car Service Division Embargo No. 400.

(5) Fruit and vegetable containers and box shooks moving from points in Washington, Oregon, and California to destinations in California; or moving wholly within the state of Washington.

(6) Pop corn.

In addition to these exceptions, the I.C.C. order provides that special permits may be issued "to meet specific needs or exceptional circumstances."

Service Orders No. 870 and 871 have been issued by the I.C.C. to limit the free time allowed on cars held for loading or unloading at points of transfer between cars and vessels or storage. Order No. 870 relates to cars held at ports for loading; it applies to box cars, and limits to 5 days the free time on such cars. No. 871 relates to cars held at ports for unloading; it applies to all types of freight cars and limits the free time to 7 days. Saturdays, Sundays and holidays are to be excluded in the computation of the free time; and, in that connection, the service order (No. 856) which has provisions requiring that Saturdays and Sundays be counted in the computation of demurrage was amended to exempt from such provisions the cars covered by Orders No. 870 and 871. The latter, as well as the amendment to No. 856, were scheduled to become effective December 15.

ABANDONMENTS

Minneapolis & St. Louis.—The I.C.C. has reinstated the Division 4 report which authorized this road to abandon its branch line between Newburg, Iowa, and Laurel. (See *Railway Age* of October 28, page 182.) The authorization had been suspended indefinitely after parties protesting the abandonment filed a petition for reconsideration of the case. The commission has now denied that petition.

Application has been filed with the I.C.C. by:

GULF, MOBILE & OHIO.—To abandon 20.9 mi. of line and 3.1 mi. of passing and switching tracks, between Carrollton, Ill., and East Hardin.

Division 4 of the I.C.C. has **authorized:**

CENTRAL VERMONT.—To abandon 2.7 mi. of its South Barre branch, from a point near Barre Junction, Vt., to the end of the line.

CHESAPEAKE & OHIO.—To abandon its ferry across the Ohio river between Ripley, Ohio, and South Ripley, Ky. The ferry, which handles both freight and passenger traffic, has been in operation since 1888.

CHICAGO, ROCK ISLAND & PACIFIC.—To abandon 6,514 ft. of its Union Depot line between Clayton, Mo., and University City.

CONSTRUCTION

Chicago, Rock Island & Pacific.—Work is continuing on this company's new freight line into Denver, Colo. (see *Railway Age* of June 24), with a contract for construction of a three-span steel and concrete bridge at the Union Pacific's double-track line where it crosses over the new freight line awarded to J. H. & N. M. Monaghan & Associated Cos., of Derby, Colo. ($53,000); and a contract for construction of substructure for a three-span steel and concrete bridge at the Chicago, Burlington & Quincy's main track crossing over the new line to List & Weatherly Construction Co., of Kansas City, Mo., at an estimated

"Chessie" WINS FRIENDS with DIXIE CUPS

Travelers everywhere . . . young and old . . . know Chessie, famous trademark of the C & O . . . one of America's most progressive railroads. The same travelers . . . and millions more . . . know the name Dixie Cup.

To the deluxe appointments and handsomely styled interiors of the C & O streamliners, Dixie Cups add a finishing touch in passenger convenience and comfort. And seeing Dixie Cups en route is like meeting old friends, for Dixies are the most popular of all paper cups.

Like other leading railroads the C & O takes pride in offering its passengers the best of everything. That includes Dixie Cups and the modern cup dispensing equipment made by Dixie to meet all installation and service requirements.

● **SPECIAL IMPRINTING OF CUPS WITH YOUR INSIGNIA, SLOGAN, NAME OR OTHER MESSAGE TO YOUR ORDER. Write to Railroad Department, Dixie Cup Company, Easton, Pennsylvania.**

SPACE SAVER
perfect for roomettes, compartments, wherever space saving is a "must".
DIXIE RECESSED DISPENSER
. . . Gleaming satin-chrome finish; fits flush with bulkhead. Takes standard flat-bottom Dixies or cone shaped Vortex Cups in either large or small sizes. Exclusive Dixie feature provides interchangeable cup adapters for dual advantage.
STREAMLINER
. . . trim, smartly styled Dixie dispenser quickly mounts anywhere. Unbreakable plastic window shows refill need. Holds flat-bottom Dixies or cone-shaped Vortex Cups . . . either large or small sizes.

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STANDARD IN RAILROAD SERVICE FOR OVER 30 YEARS

cost of ($40,600). In addition, a timber and steel bridge, consisting of 21 panels of pile trestle, and one 47-ft. and one 70-ft. deck plate girder span, over the Burlington ditch and Platte river, is being built at an estimated cost of $27,000 by the Monaghan group.

At Davenport, Iowa, the two-story office and garage building for the Railway Express Agency (reported by *Railway Age* on June 24) is being built by the John Soller Construction Company of that city, who are also carrying out repairs and remodeling of the adjacent passenger station, at a total estimated cost of $140,400. A rail freight transfer terminal and office building is being constructed at Kansas City, Mo., by the Interstate Construction Company, of that city, to cost an estimated $315,500. A masonry-type passenger station is being constructed at Hutchinson, Kan., by the N. F. English Construction Company of Hutchinson. The structure will be 29 ft. by 128 ft. and will cost an estimated $78,000. A concrete drop table pit is being constructed at the El Reno, Okla., diesel shop by the Industrial Construction Company, of Oklahoma City, to cost about $26,000.

FINANCIAL

Canadian Pacific.—*New Directors.*—James Muir of Montreal, Que., president of the Royal Bank of Canada, R. J. Dinning of Calgary, Alta., president of the Burns Company, and H. E. Sellers of Winnipeg, Man., president and general manager of Federal Grain, Ltd., have been appointed to this road's board of directors.

Chicago, Rock Island & Pacific.—*Control of Peoria & Bureau Valley.*—The I.C.C. has granted authority for this road to acquire control of the 47-mi. P.&B.V. through ownership of capital stock. The Rock Island owns 6,674 shares, or approximately 44.5 per cent, of the 15,000 shares outstanding, and operates the P.&B.V. property under a perpetual lease dating from 1854. Division 4 noted that this proceeding "involves only control of the corporation," but imposed a condition that Rock Island may not purchase more than 2,000 additional shares of P.&B.V. stock.

Gulf, Mobile & Ohio.—*Trackage Rights Into Birmingham, Ala.*—The I.C.C. has reopened for further hearing the proceedings in which this road proposes to acquire a new route into Birmingham, Ala. (See *Railway Age* of May 13, page 68). The new hearing was requested by the Southern, the Alabama Great Southern, and the New Orleans & Northeastern. In a petition to the I.C.C. the latter roads said they wished to submit additional evidence in the case, "contradicting, amplifying or correcting" certain exhibits and testimony filed by G.M.&O. and the Louisville & Nashville. The further hearing has been scheduled for January 11, 1951, and will be held in Washington, D.C., before Examiner Lyle.

Long Island.—*New Trustee Appointed.*—William Henry Draper, Jr., vice-president of Dillon, Read & Co., has been appointed trustee of this company by U. S. District Judge Harold M. Kennedy, who has jurisdiction over reorganization proceedings for the railroad. As reported on page 66 of last week's *Railway Age*, Mr. Draper was recommended for the position by the special commission which was appointed following the November 22 wreck at Kew Gardens, N. Y., to study the operation and finances of the railroad. If his appointment is approved by the I.C.C., Mr. Draper will succeed David E. Smucker and Hunter L. Delatour, whose resignations as trustees were reported on page 73 of the *Railway Age* of December 2.

Wisconsin Central.—*Reorganization.*—I.C.C. Examiner Homer H. Kirby has recommended in a proposed report that the commission modify this road's plan of reorganization as approved by Division 4 on June 3, 1947. Among other things, Examiner Kirby would change the effective date of the plan from July 1, 1947, to January 1, 1951, and he would increase the reorganized company's total capitalization from $46.8 million to $55.2 million (as compared to the existing $68.7 million).

Following the commission's former report in 1947, various bondholding groups asked for further hearings and Division 4 reopened the case in February, 1948. The report of Examiner Kirby resulted from the reopened proceedings, and reflects "new evidence on many important issues and aspects" in the case.

In general, the modifications recommended by the examiner are based on improvements in the road's financial situation since the initial hearings in 1945. The new capitalization would be divided between debt and stock in the amounts of $34,226,671, and $21,021,700 respectively. On this basis, annual charges under Examiner Kirby's recommendations would amount to $1,614,105, as compared to $1,165,758 under the 1947 plan.

Other changes from the original plan, as proposed by the examiner, would place the road's new first mortgage bonds on a fixed interest basis rather than on contingent interest. Holders of the present first general mortgage bonds would receive $14,765,000 in new bonds, representing full payment of their claims.

The modified plan also would provide for the creation of "property replacement funds," one for equipment and one for fixed property. Such funds would permit the new company in the future to make property replacements out of earnings, with cash earmarked for that purpose. As in the 1947 plan, Examiner Kirby would dismiss the claims of unsecured creditors and the holders of the road's preferred and common stocks as having no value.

New Securities

Application has been filed with the I.C.C. by:

INTERSTATE.—To assume liability for $700,000 of series H equipment trust certificates to finance in part 200 steel hopper cars. These cars, to be constructed in company shops, would cost approximately $4,000 each, making the total cost about $800,000. The certificates would be dated March 1, 1951, and would mature in 10 annual installments of $70,000 each, beginning March 1, 1952. They would bear interest at 2¾ per cent, and would be sold by competitive bids.

NEW YORK, CHICAGO & ST. LOUIS.—To issue and sell 33,770 shares of $100 par common stock, to be offered to present stockholders at the rate of one share for each ten shares held. The price at which the stock is to be offered would be set at a later date. Recent fluctuations in the market price of the road's stock, coupled with uncertain political and economic conditions that may affect the price, make it impossible to fix a definite price substantially in advance of the actual offering, the road said.

The stock would be issued against a portion of the uncapitalized additions and betterments made by the road between January 1, 1945, and December 31, 1946. Proceeds from the sale of the stock would be used to reimburse the road's treasury for expenditures made in connection with these additions and betterments.

At present the road has 337,434.9 shares of common stock outstanding. On the road's outstanding 6 per cent cumulative preferred stock there are dividend arrears of $45 a share. These accruals have been reduced from approximately $87 a share since December 31, 1945.

Division 4 of the ICC has **authorized:**

DENVER & RIO GRANDE WESTERN.—To issue and sell $1,000,000 of series A first mortgage bonds, bearing fixed interest at 3 per cent and contingent interest at 1 per cent. The bonds are a part of those authorized in connection with the road's reorganization, and have been held in the company's treasury. They are dated January 1, 1943, and will mature January 1, 1993. They are to be sold at not less than 95 and accrued interest from July 1, 1950. Proceeds from sale of these bonds will be used to reimburse the road for $576,875 used in redeeming first mortgage bonds of the Denver & Salt Lake, and for other sums used in prepaying a collateral note of the D. & R.G.W. to the Chase National Bank of New York.

MONTOUR.—To issue an unsecured promissory note of $200,000 to finance in part three new diesel-electric switching locomotives costing approximately $302,103. (See *Railway Age* of November 4, page 94.) The note, to be dated December 1, will be purchased by the Mellon National Bank & Trust Co. at par and accrued interest. It will bear interest at 2½ per cent, and will mature in eight semi-annual installments of $25,000 each, beginning June 1, 1951.

NEW YORK, CHICAGO & ST. LOUIS.—To assume liability for $3,120,000 of equipment trust certificates to finance in part 35 diesel-electric locomotives costing approximately $3,931,199. (See *Railway Age* of November 25, page 64). The certificates, to be dated December 15, will mature in 30 semiannual installments of $104,000 each, beginning June 15, 1951. Division 4's report approved a selling price of 99.821 with interest at 2½ per cent — the bid of Salomon Brothers & Hutzler and three associates — which will make the average annual cost of the proceeds approximately 2.53 per cent. The certificates were reoffered to the public at prices yielding from 1.6 to 2.65 per cent, according to maturity.

Dividends Declared

Allegheny & Western.—$3, semiannual, payable January 1, 1951, to holders of record December 20.

Canadian Pacific.—common, $1, payable in Canadian funds February 28, 1951, to holders of record December 29.

Chicago & North Western.—common (resumed), $1.50; 5% preferred, $2.65, both payable December 27, to holders of record December 15.

Chicago South Shore & South Bend.—common, 25¢ quarterly, payable December 15, to holders of record December 5.

Detroit, Hillsdale & South Western.—$2, semiannual, payable January 5, 1951, to holders of record December 20.

Illinois Central Leased Lines.—4% guaranteed,

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Lima Locomotive Works Division

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Illinois Terminal.—common, 20¢, quarterly, payable February 1, 1951, to holders of record January 10, 1951.

Northern Central.—$2, semiannual, payable January 15, 1951, to holders of record December 29.

Norwich & Worcester.—8% preferred, $2, quarterly, payable January 2, 1951, to holders of record December 15.

Pittsfield & North Adams.—$2.50, semiannual, payable January 2, 1951, to holders of record December 15.

Tennessee, Alabama & Georgia.—common, 35¢, payable December 22 to holders of record December 11.

Texas & Pacific.—common, $1, quarterly; $1, extra, both payable December 28 to holders of record December 21.

Security Price Averages

	Dec. 12	Last week	Last year
Average price of 20 representative railway stocks	52.12	48.40	40.01
Average price of 20 representative railway bonds	96.92	96.00	88.20

RAILWAY OFFICERS

EXECUTIVE

H. L. Balser, auditor and secretary-treasurer of the BAMBERGER at Salt Lake City, Utah, has been appointed vice-president, to succeed **George E. Giles,** who has resigned but will continue as director. Mr. Balser has also been appointed general manager.

Downing B. Jenks, vice-president and general manager of the CHICAGO & EASTERN ILLINOIS, resigned from that position on December 1 to accept the newly created position of assistant vice-president, CHICAGO, ROCK ISLAND & PACIFIC. Mr. Jenks, who is 34, was born in Portland, Ore., and was graduated from Yale University in 1937. He entered railroad service on July 1 of that year on the New York division of the Pennsylvania. From 1938 to 1948, he held such positions as division engineer, trainmaster and division superintendent on various divisions of the Great Northern. Between 1942 and 1945, Mr. Jenks served in the United States Army as superintendent of car service and assistant general superintendent of the Military Railway Service in North Africa, Italy, France and Germany. Prior to coming to the C.&E.I. in October, 1948, he served as superintendent of the Spokane division of the G.N. at Spokane, Wash.

Downing B. Jenks

Paul J. Kindler has been named assistant to the president of the ERIE, and **John J. Straut** has been appointed assistant to the vice-president for operations and maintenance, both with headquarters as before at Cleveland, Ohio. Mr. Kindler was born at Huntington, Ind., and joined the Erie there as a stenographer in 1914. He served as trainmaster's clerk, transportation accountant and division clerk at Huntington until 1935, when he was promoted to chief clerk to the general manager of the Western district at Youngstown, Ohio. In 1939 Mr. Kindler was appointed assistant supervisor of the wage bureau in Cleveland and in 1948 became chief clerk to the vice-president for personnel. He was appointed chief clerk to the president a year ago.

Paul J. Kindler

Mr. Straut was born at Paterson, N. J., and entered railroad service in 1916 as a clerk for the superintendent of the New York, Susquehanna & Western, then operated by the Erie. He held various clerical and secretarial positions in the maintenance, engineering, signal and stores departments in the Eastern district until the Erie moved its headquarters to Cleveland in 1931. He then became contract clerk for the operating department at Cleveland. Mr. Straut was named secretary to the vice-president for operations in 1933, contract assistant in 1940, and chief clerk to the vice-president in 1946.

John J. Straut

Carlos J. McDonald, assistant to the president of the SOUTHERN PACIFIC, will retire on December 31, after more than 45 years of service with the company. Mr. McDonald will be succeeded by **L. B. Young,** who is now vice-president and general manager of the PACIFIC MOTOR TRUCKING COMPANY, a subsidiary of the railroad. In his new position Mr. Young will have supervision over the company's highway trucking operations, mail and express traffic, and land and real estate matters. **H. J. Walker,** executive assistant, will be advanced to the position of assistant to the president, and will take over supervision of certain of the company's subsidiaries, become chairman of the system committee on insurance, and assume other assigned duties.

Harold J. McKenzie, chief engineer of the SOUTHERN PACIFIC LINES IN TEXAS AND LOUISIANA, has been appointed executive vice-president of the ST. LOUIS SOUTHWESTERN, effective January 1, 1951, with headquarters at St. Louis, Mo.

FINANCIAL, LEGAL & ACCOUNTING

Herbert H. Siddall was appointed acting general auditor of the CHICAGO, ROCK ISLAND & PACIFIC on December 1. Mr. Siddall succeeds **A. J. Messersmith,** who is presently on leave of absence and whose retirement will take effect after the first of the year.

Allen T. Shott, Jr., has been appointed secretary and treasurer of the BAMBERGER at Salt Lake City, Utah, and **H. B. Olsen** has been appointed assistant auditor.

OPERATING

Fred W. Ferguson, who has been promoted to general superintendent of the ST. LOUIS SOUTHWESTERN, with headquarters at Tyler, Tex., as reported in the November 4 *Railway Age,* was born near Huntsville, Tex., on March 25, 1891. He began railroading in 1905 with the International-Great Northern (part of the Missouri-Pacific Lines) as a messenger boy at Huntsville, holding various positions with the road until 1913. Subsequently he joined the Cotton Belt as assistant extra gang foreman, and since that time has served continuously with the same road except from 1917 to 1919, when he was in the Engineers' Reserve Corps of the U. S. Army. After being detailed to

(Continued on page 73)

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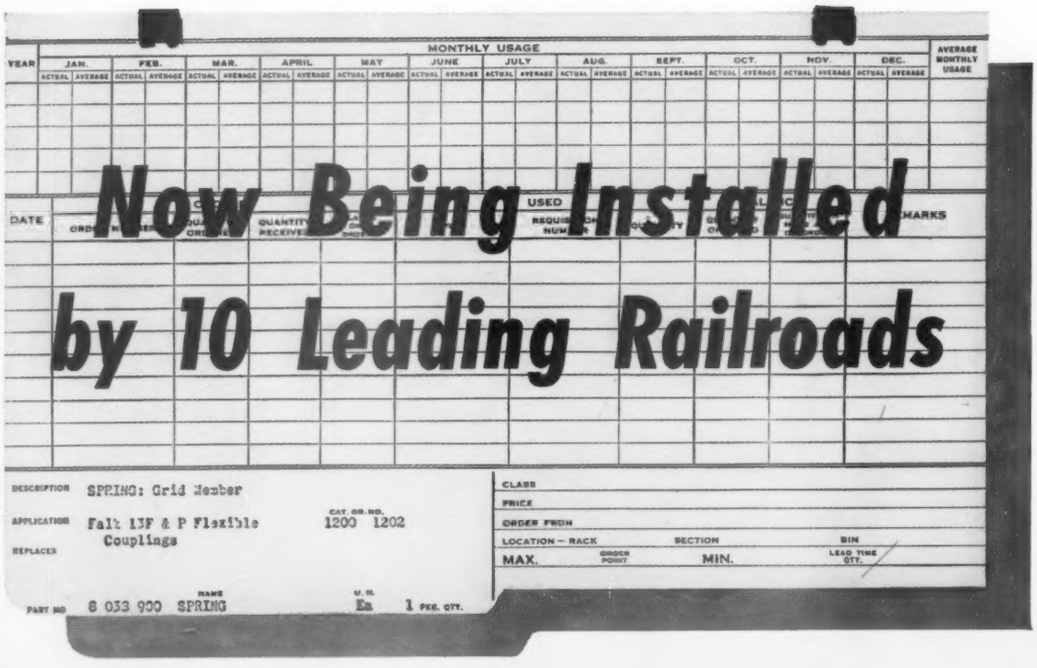

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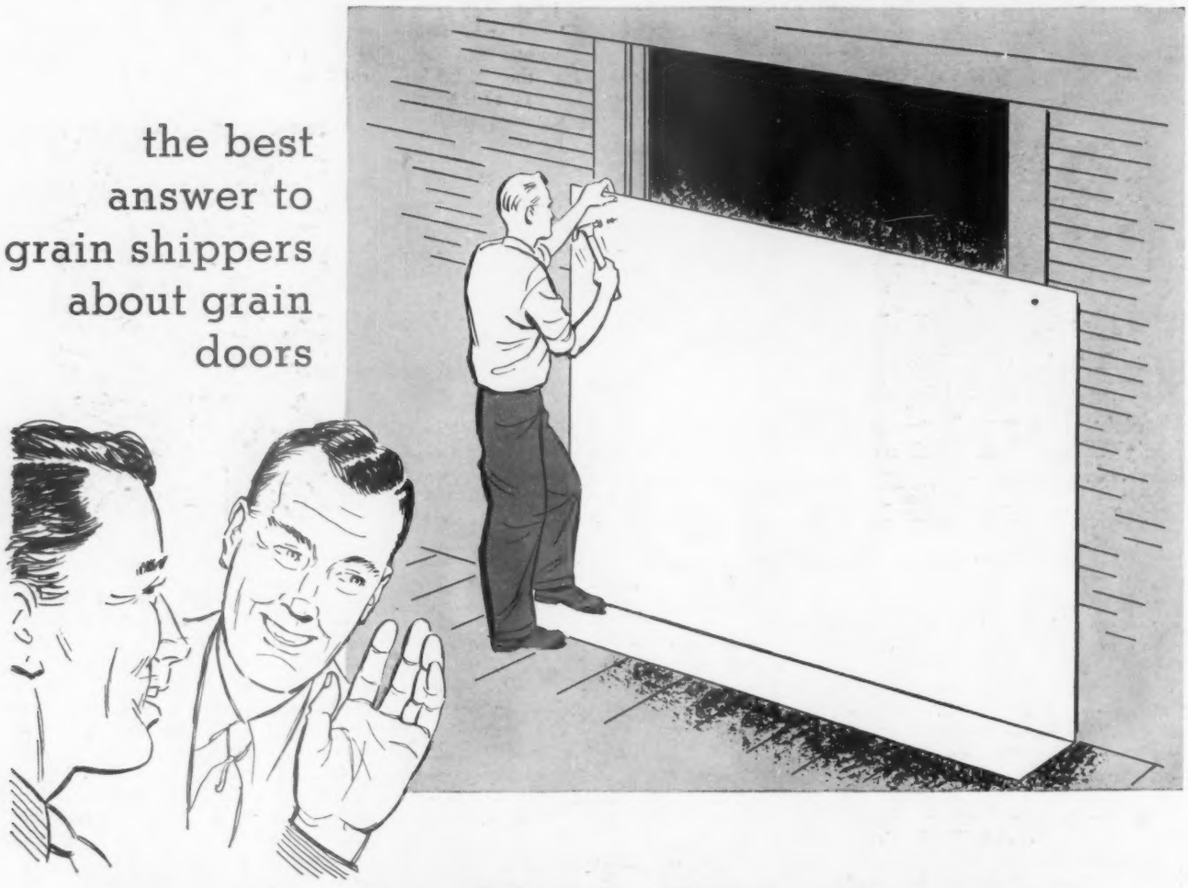

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(Continued from page 68)
various points in Texas as clerk-telegrapher, in 1919 Mr. Ferguson became train dispatcher at Mt. Pleasant, Tex., and in 1921 was appointed chief clerk to assistant superintendent at Tyler. He later served as division agent and assistant chief dispatcher at that point until 1928, when he was assigned to

Fred W. Ferguson

special work coordinating rail and road service. In 1932 Mr. Ferguson became assistant chief dispatcher at Tyler, and, in 1934, assistant superintendent on the Texas division, being transferred in 1938 to the Northern division. He was advanced to superintendent at Pine Bluff, Ark., in 1946, from which position he was recently promoted.

The CHICAGO & EASTERN ILLINOIS has appointed **Joseph T. Theby,** superintendent, as general manager. Mr. Theby replaces **Downing B. Jenks,** whose resignation on December 1 to become assistant vice-president—operations of the CHICAGO, ROCK ISLAND & PACIFIC is recorded elsewhere in this issue. **Albert W. Schroeder,** chief engineer of the C.&E.I., has been appointed superintendent in Mr. Theby's place.

T. E. Griswold, superintendent of the Eastern division of the TEXAS & PACIFIC at Fort Worth, Tex., will retire at his own request, for reasons of health, on January 1, 1951. He will be succeeded by **W. T. Alexander,** superintendent of the Western division, whose present headquarters are at Big Spring, Tex. **W. C. Foster,** superintendent of the Louisiana division at Alexandria, La., will succeed Mr. Alexander, and **T. E. Albright,** assistant superintendent of the Eastern division at Fort Worth, will succeed Mr. Foster. **K. D. Hestes,** trainmaster at Mineola, Tex., will succeed Mr. Albright. **C. T. Barrett** has been appointed to succeed Mr. Hestes. **W. R. Swaidner,** trainmaster at Marshall, Tex., has been transferred to Alexandria, succeeding **J. H. Williams,** who has been appointed superintendent of safety at Dallas, Tex. Mr. Swaidner has, in turn, been succeeded by **L. B. Griffin.**

The CHESAPEAKE & OHIO has announced the appointment of **F. S. Harris** as superintendent of Chicago terminals for its Chesapeake and Pere Marquette districts, with headquarters as before at Chicago. Mr. Harris' former position — superintendent of Chicago terminals for the C.&O.'s Chesapeake district — was abolished effective with his appointment to the new position on December 8.

Clifford H. Ward and **C. H. Terrill,** chief clerks to the general managers of the ERIE's Eastern and Western districts, respectively, have been promoted to assistants to the general managers, with headquarters as before at Jersey City, N. J., and Youngstown, Ohio, respectively.

TRAFFIC

The office of **C. A. Fullen,** division freight and passenger agent of the CHICAGO GREAT WESTERN at Des Moines, Iowa, has been moved to the road's new passenger station at 1800 S.W. Ninth street, P. O. zone 15. The new building now accommodates all C.G.W. passenger trains and houses the terminal operating staff.

The UNION PACIFIC has announced changes in traffic personnel hinging on the retirements of **W. T. Price** and **H. A. Lawrence,** traffic managers at Los Angeles, Cal., and San Francisco, respectively. Mr. Price will be succeeded by **J. W. Padden,** present freight traffic manager at Salt Lake City, Utah. Mr. Lawrence's successor

W. T. Price

will be **M. H. Fowler,** assistant freight traffic manager at Omaha, Neb. Taking Mr. Padden's place at Salt Lake City will be **Samuel Reinhardt,** general agent at Pittsburgh, Pa. He, in turn, will be succeeded by **J. M. Adams,** present chief clerk of freight traffic at New York. **D. H. Voltz,** traffic manager at Chicago, will be transferred to Omaha as freight traffic manager and his Chicago position will be taken by **H. C. Yerger,** freight department general at New York. **L. G. Stahl,** general agent, freight department, at Kansas City, Mo., will be transferred to New York, and will be succeeded by **J. F. Turrentine,** now general agent at Sioux City, Iowa. All changes will become effective on January 1, 1951.

Mr. Price was born at Astoria, Ill., on August 12, 1883. He entered railroad service at the age of 20 as a clerk

H. A. Lawrence

in the local freight office of the Chicago, St. Paul, Minneapolis & Omaha (now part of the Chicago & North Western system) and on March 1, 1904, went to the U.P. as a claims clerk and adjuster in the freight claim department at Omaha. In 1911 he was appointed freight agent at Denver, Colo. He remained in that city to advance successively to the positions of general agent in 1920, assistant general freight agent in 1925, general freight and passenger agent in 1936, assistant traffic manager in 1939 and traffic manager in 1940. He was promoted to his present position in 1944.

Mr. Lawrence came to the U.P. in 1910 as a ticket clerk at Seattle, Wash. He advanced through various positions in that office and was named general agent, passenger department, in that

J. W. Padden

city in 1923. In 1927, Mr. Lawrence was promoted to passenger department general agent at New York. In 1944 he became traffic manager at Denver

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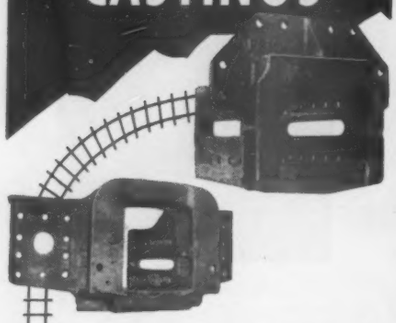

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and two years later assumed his present position at San Francisco.

Mr. Padden entered the Union Pacific's operating department in 1914. In 1923 he was transferred to the traffic department as a clerk at Astoria, Ore., and thereafter advanced through various positions until he was appointed general agent at Bend, Ore., in 1937. Since that time, Mr. Padden has served successively as general agent at Tacoma, Wash., general agent, freight department, at Salt Lake City, and assistant traffic manager at Los Angeles. He has been traffic manager at Salt Lake City since January 1, 1949.

M. H. Fowler

Mr. Fowler was born at Parsons, Kan., in 1904 and received his education at the Riverside, Cal., high school. He entered railroad service with the U.P. as a stenographer-clerk at Riverside in 1922. He was subsequently transferred to Pomona, Pasadena, Glendale and Los Angeles, serving in various capacities. He was appointed general passenger agent at Los Angeles in 1943 and from 1946 to 1948 held the position of traffic manager at Detroit,

Samuel Reinhardt

Mich. He was transferred to his preents position at Omaha in 1948.

Mr. Reinhardt joined the road in 1918 at Salina, Kan., as a clerk in the operating department. In 1926, at Topeka, he transferred to the traffic department as a freight traffic agent. After subsequent service at Salina and

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at Tulsa, Okla., Mr. Reinhardt was promoted, in 1944, to the position of general agent at Dallas, Tex. Two years later he was transferred to Kan-

D. H. Voltz

sas City in the same capacity. He has been at Pittsburgh, Pa., as general agent since March 1, 1948.

Mr. Voltz was born at Garfield, Ark., and entered railroad service with the U.P. as a telegrapher in 1917. He transferred to the traffic department in 1919 and served as a clerk at Lin-

H. C. Yerger

coln, Neb. During the years that followed, he served in various capacities at Des Moines, Iowa, Philadelphia, Pa., Chicago, Cincinnati, Ohio, Salt Lake City and New York. He was appointed traffic manager at Chicago in 1944.

Mr. Yerger joined the U.P. at Philadelphia in 1916 as a stenographer in the traffic department. He became a traveling freight and passenger agent at New York in 1925 and was promoted to general agent at Boston, Mass., in 1938. He assumed his present position at New York in 1944.

MECHANICAL

The CANADIAN PACIFIC has announced appointment of **R. A. Davis** as district master mechanic, at Moose Jaw, Sask.

The WESTERN PACIFIC has announced that the title of **E. E. Gleason** has been changed from superintendent of motive power to that of chief mechanical officer. Similarly, the title of **E. T. Cuyler** has been changed from assistant superintendent of motive power to that of assistant chief mechanical officer.

A. E. Lang, general foreman of the NEW YORK CENTRAL, has been appointed assistant master mechanic, with headquarters as before at Elkhart, Ind., succeeding **J. E. Quinlivan,** transferred.

W. P. Hartman, mechanical superintendent of the ATCHISON, TOPEKA & SANTA FE's Coast lines at Los Angeles, Cal., has been appointed assistant general manager of the mechanical department for the Santa Fe system, with headquarters at Chicago. **Thomas C. Blickle,** mechanical assistant at Chicago, has been named to succeed Mr. Hartman at Los Angeles.

Effective December 1, **H. H. Niemeyer** was appointed master mechanic of the CHICAGO, BURLINGTON & QUINCY's Beardstown division, with headquarters at Beardstown, Ill. Mr. Niemeyer succeeds **C. E. Plott,** who has retired.

PURCHASES & STORES

As reported in the *Railway Age* of November 18, **Vance Bristow King** has been appointed purchasing agent of the PIEDMONT & NORTHERN and the DURHAM & SOUTHERN at Charlotte, N. C. Mr. King was born on March 8, 1907, at Portsmouth, Va., and attended the public schools of Charlotte. He en-

Vance Bristow King

tered the service of the P.&N. on April 1, 1925, as a laborer at Pinoca shops, where on November 16, 1925, he became carman helper. On September 7, 1926, he was appointed storekeeper of the North Carolina division and three months later became timekeeper at Pinoca shops. On October 4, 1928, Mr. King was appointed material and supply clerk in the general offices and on April 1, 1943, was elevated to chief clerk, purchases and stores, the position he held at the time of his recent promotion.

As reported in the *Railway Age* of November 18, **Walter Aldine Thomason,** purchasing agent of the PIEDMONT & NORTHERN and the DURHAM & SOUTHERN at Charlotte, N. C., has retired after some 30 years of service. Mr. Thomason was born at Blacksburg, S. C., on January 8, 1893, and attended public schools and Eastman College, Poughkeepsie, N. Y. Between 1911 and 1915, Mr. Thomason worked intermittently as rodman, operator-clerk, and agent for the Greenville, Spartanburg & Anderson and the Piedmont Traction Company, forerunners of the P.&N. On November 1, 1922, he became interline clerk in the general offices of the P.&N.; on May 1, 1925, he was advanced to special accountant and on July 1, 1932, he was promoted to supervisor of materials and supplies. He was appointed purchasing agent on April 1, 1943.

C. R. Murray has been appointed to the newly created position of assistant to general purchasing agent, SOUTHERN PACIFIC, with headquarters at San Francisco, Cal.

ENGINEERING & SIGNALING

D. W. Blair, division engineer of the Laurentian division of the CANADIAN NATIONAL at Quebec, Que., has been transferred to the Montreal terminals and St. Jerome division at Montreal, Que.

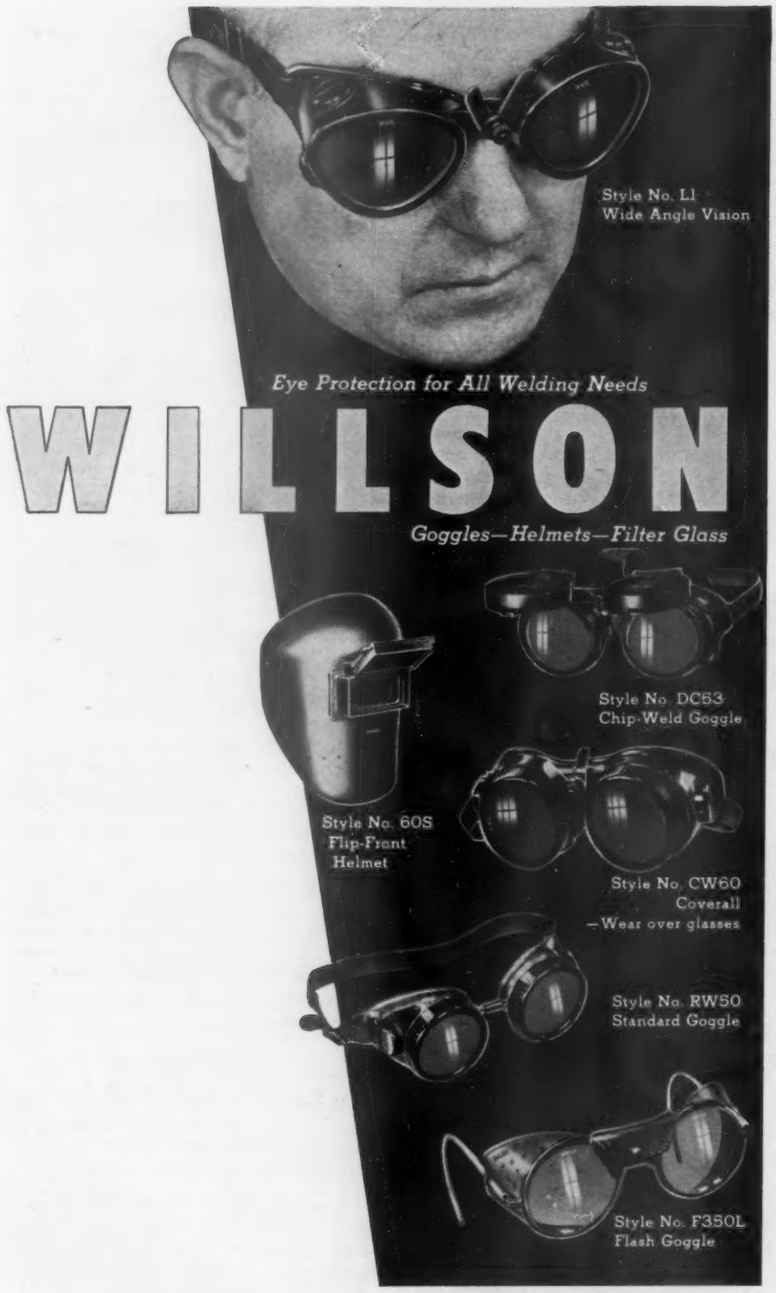
I. A. Moore, assistant chief engineer of the CHICAGO & EASTERN ILLINOIS, has been appointed chief engineer, with headquarters as before at Danville, Ill., to succeed **Albert W. Schroeder,** who has been appointed superintendent.

OBITUARY

Robert S. Gutelius, division engineer of the DELAWARE & HUDSON at Oneonta, N. Y., died at his home on December 2 at the age of 54.

Lorenzo B. daPonte, retired general counsel of the NORTHERN PACIFIC, died November 26 in St. Paul, Minn., after a brief illness. He had retired April 30, 1949, after 41 years with the road. Mr. daPonte was born in Galveston, Tex., April 23, 1879, and, following graduation from the University of Texas law school, practiced at Beaumont, before moving to the Pacific Northwest. In 1908, he began his career with the N.P. as assistant division counsel at Tacoma, Wash., and was successively assistant western counsel and western counsel at Seattle, Wash., before being appointed head of the company's law department at St. Paul in 1937.

Charles F. Palmer, passenger traffic manager of the BOSTON & MAINE and the MAINE CENTRAL, with headquarters at Boston, Mass., died of a heart attack at his home in Somerville, Mass., on December 11.



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Current Publications

BOOKS

Economics of Transportation, by Marvin L. Fair and Ernest W. Williams, Jr. 757 pages, illustrations, maps. Published by Harper & Bros., 49 E. 33rd st., New York 16. $5.50.

This study is primarily an analysis of the function of transportation in the economic system. The treatment is designed to show the place of transportation in the flow of utilities that constitutes this system. It is, therefore, not principally a study of the transportation industry which developed in response to a price system and the problem of regulation of that industry in the public interest. Rather, the emphasis is on the understanding of the function of transportation, how it has contributed to the evolution of the modern economic and social order, the nature of the demand for and supply of transportation, the development of transport facilities, services, and rate structures in response to economic and governmental influences, and the considerations involved in the evolution of an integrated transportation service.

FILM

Hoosier Line, produced and written by John A. McGee. 35 min., 16-mm., sound, color. Available for showing to clubs and similar organizations upon written application to the Chicago, Indianapolis & Louisville, 608 South Dearborn st., Chicago 5.

A musical story of the Monon, with toasts to Indiana's various scenic highlights. The film features new, especially written music, including several railroad songs sung by the Purdue University Glee Club.

TRADE PUBLICATIONS

American Steel Derricks. Catalog No. 200-D-3. 36 pages, illustrations. Published by the American Hoist & Derrick Co., St. Paul 1, Minn.

Describes the complete line of American steel derricks which have capacities up to 250 tons. Various types of derricks are treated in separate sections which contain complete specifications, outline drawings and operating pictures. Following these sections complete construction details, from boom point to sill connections, are given. One page is devoted to the recommended method of determining the boom lengths for lifting a required load to a predetermined height at a given radius.

Pyrene Air Foam Equipment. 24 pages, illustrations. Published by the Pyrene Manufacturing Company, 560 Belmont ave., Newark 8, N. J.

A brochure on air foam or mechanical foam for fire fighting, including data on methods of application; high and low expansion types of foam compound; specifications and operating characteristics for five sizes of portable playpipes; mobile and stationary foam-proportioning tanks; installations of auto-induction and pressure-line inductor systems; and air-foam systems for motor fire apparatus.

PAMPHLETS

Applications of Electricity to Railways, 1949. Prepared by Edmund A. Freeman. 50 pages. Published by Library, Bureau of Railway Economics, Association of American Railroads, Transportation bldg. Washington 6, D. C. Free.

A bibliography of articles on railroad electrification, diesel-electric and electric locomotives, and electrical apparatus and equipment appearing in a select list of periodicals. Bibliographies on communications and signaling appear in an appendix.

Fifteen Years Under the Railway Labor Act, Amended, and the National Mediation Board, 1934-1949. 92 pages. Available from Government Printing Office, Washington 25, D. C.

The primary purpose of this publication is to meet a demand for general information respecting the Railway Labor Act and the organization and function of, and procedure before, the National Mediation Board. It is intended to serve as an answer to the numerous requests from other government agencies, labor and business groups, schools and colleges, students and libraries seeking information regarding the Railway Labor Act and the N.M.B. The secondary purpose is to present a recapitulation of the operations of the N.M.B. from July 21, 1934, the date it began to function, to June 30, 1949, which marks the end of its 15th fiscal year.

Preliminary Report on Statistics of Steam Railways, 1949. 9 pages. Prepared in Public, Finance & Transportation division, Dominion Bureau of Statistics, Department of Trade & Commerce, Ottawa, Ont. 10 cents.

Includes data on income account, train mileage, freight and passenger traffic, and car mileage for each Canadian railway; also data by job classification on employees and their compensation.

What is the Monon? 6 pages, illustrations. Distributed by the Chicago, Indianapolis & Louisville.

Describes the "little" features of the road's passenger and freight services. Tells the goal of the "new" Monon—of building upon the heritage of a century-old property a transportation service that will be preferred over all other forms of modern transport by both shippers and passengers of the area it serves.

Train and Engine Books for Children, Fourth edition. 19 pages. Published by the Association of American Railroads, Transportation bldg., Washington 6, D. C. Free.

Designed as a guide to library reading and as a buying guide, books entirely about trains or engines, or both, for children below the teen-age are included. Limited to books available for purchase at time of compilation, the list is arranged alphabetically by title. Following this arrangement, the books are grouped for convenient reference under subjects, authors, illustrators, and grade level suggestions. A publishers' directory appears at the end.

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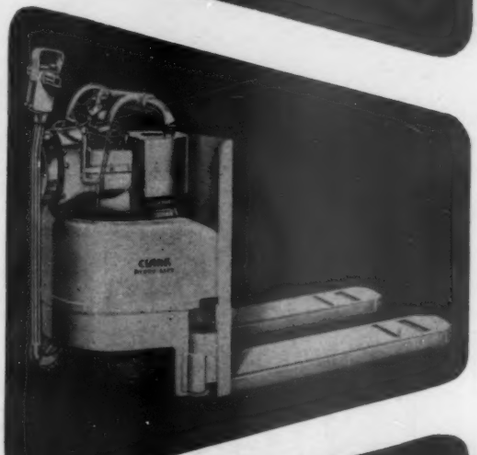
1 Electro-Lift

New-type compound motor develops more power than any other electric truck. Ample reserve power—high gradability. Automatic acceleration. Soft, dynamic braking. Requires minimum operator effort because speed variations are negligible. 19-plate batteries.



2 Hydro-Lift

Gas-engine drives variable-displacement hydraulic pump which drives constant-displacement hydraulic motor with unequalled smoothness and controllability. 24-hour ramp service. Automatic torque multiplication—big reserve power. Effortless finger-tip positioning of directional controls.

One Basic Design

Same rugged frame for both power types. Shortest wheelbase. Larger (14") drive tire carries greater share of load—lessens weight on rollers—less wear on rubber and floor. Greatest underclearance. Compact drive unit fully enclosed. Largest main carrier bearing of all hand trucks.

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NATIONAL RUBBER-CUSHIONED

cushion the ride behind

THE National Rubber-Cushioned Type M-380 Draft Gear shown here cushions the ride behind 9 out of 10 heavy diesel and electric freight and passenger locomotives. Here are some of its basic advantages and an explanation of its simple design:

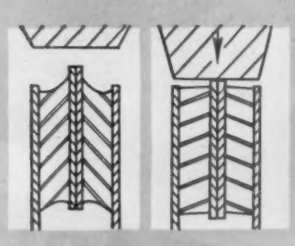
DOES NOT CREEP—Under sustained loads, gear will not creep.

RESERVE DYNAMIC CAPACITY—To provide the best combination of soft riding action and high shock absorption, dynamic capacity of a gear must be greater than its static capacity. The National Type M-380 Gear has dynamic capacity that actually increases with severity of the shock.

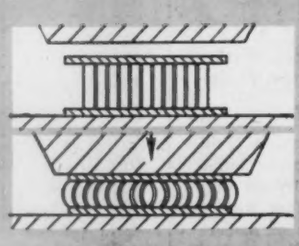
DURABILITY—National Rubber-Cushioned Draft Gears give outstanding service for years. Rugged construction and simple design assure a gear with longer life, greater efficiency.

For more information on National Rubber-Cushioned Draft Gears, write for Circular No. 5047. National Malleable and Steel Castings Company, Cleveland 6, Ohio.

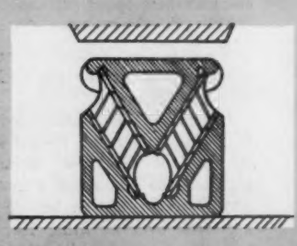
Basic unit in National Type M-380 Draft Gears is this rubber pad bonded between steel plates. Specially compounded rubber cushions the load in two important ways.



Shear loading, which applies force to the edges of each of the two plates, is highly responsive to light shocks, but load that can be applied per cubic inch of rubber is limited.



Compression loading enables the pad to carry much greater loads than the same quantity of rubber in shear, but the deflection and responsiveness are much less than in shear loading.



Combination loading has double advantage. National Rubber-Cushioned Draft Gears, Type M-380, combine sensitiveness of shear loading with capacity of compression loading.

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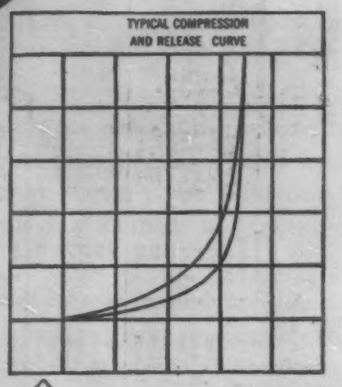
TRUCKS • COUPLERS • YOKES • DRAFT GEARS

DRAFT GEARS

9 out of 10 heavy diesels

TYPE M-380

In the National Rubber-Cushioned Type M-380 Draft Gear two pairs of rubber pads cushion loads over 500,000 pounds.



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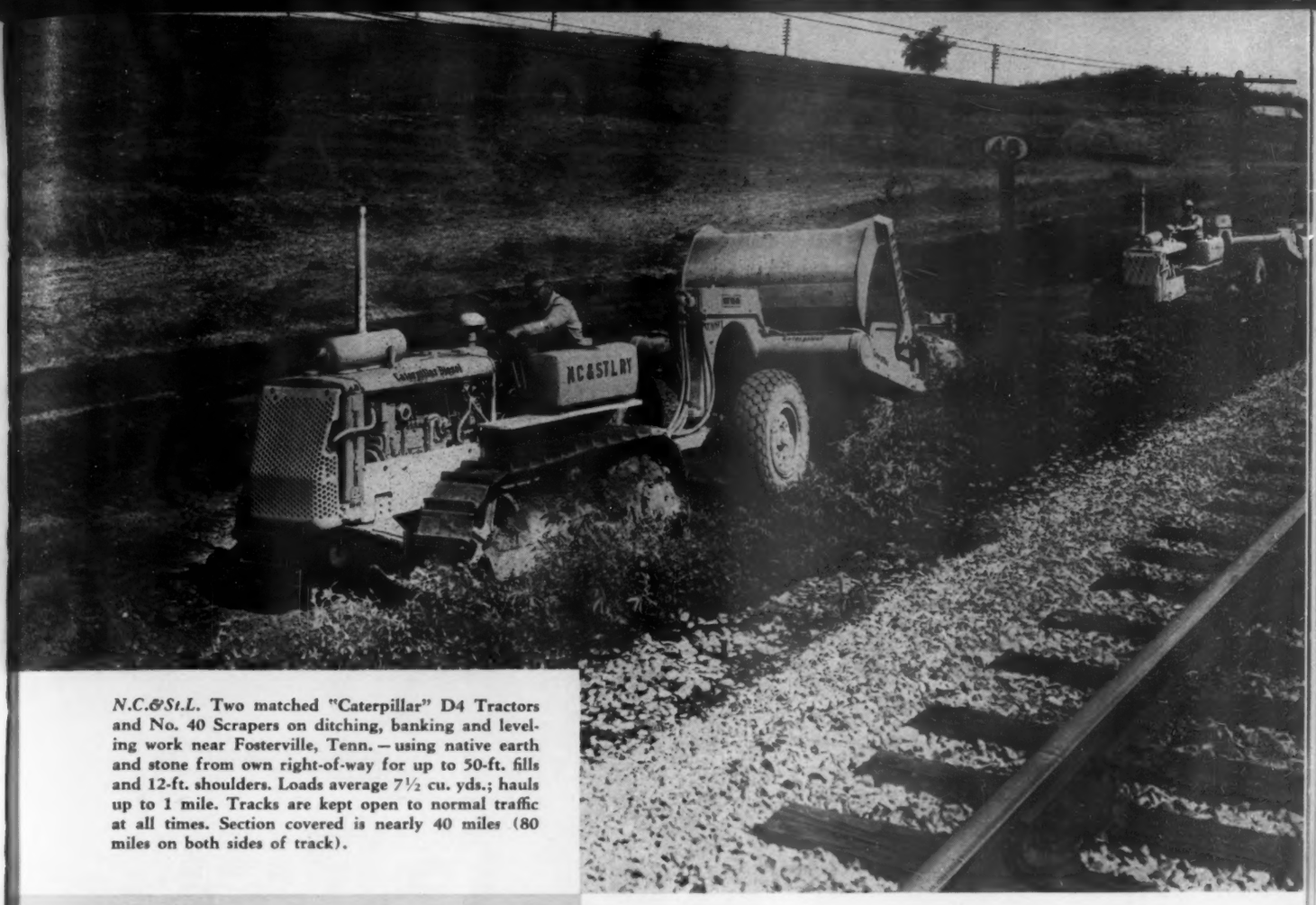
CASTINGS COMPANY
JOURNAL BOXES AND LIDS

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1950

Name of road		Av. mileage operated during period	Operating revenues			Operating Expenses					Operating ratio	Net from railway operation	Railway tax accruals	Net railway operating income	
						Maintenance of									
			Freight	Passenger	Total (inc. misc.)	Way and structures	Equipment	Traffic	Transportation	Total				1950	1949
Akron, Canton & Youngstown	Oct.	171	431,359	77	462,263	63,131	43,101	39,364	129,545	299,016	64.7	163,247	67,299	79,073	27,845
	10 mos.	171	4,030,315	710	4,183,067	618,899	415,424	303,865	1,228,326	2,782,495	66.5	1,400,572	566,535	734,652	426,015
Atchison, Topeka & Santa Fe System	Oct.	13,074	44,016,241	3,680,162	51,582,101	6,701,924	8,363,032	939,314	14,087,515	31,786,480	61.6	19,795,621	9,843,137	10,093,103	5,966,060
	10 mos.	13,073	344,046,585	36,975,943	415,650,411	60,102,702	72,715,192	9,653,387	128,442,572	287,875,101	69.3	127,775,310	66,215,456	61,405,392	44,063,858
Atlanta & St. Andrews Bay	Oct.	82	252,552	3,141	262,649	24,873	16,697	9,091	54,687	117,519	44.7	145,130	67,656	55,878	71,347
	10 mos.	82	2,379,616	15,636	2,458,553	315,234	183,972	73,981	527,666	1,223,832	49.8	1,234,721	490,478	522,846	284,951
Atlanta & West Point	Oct.	93	342,500	39,571	448,747	47,261	46,851	14,698	168,556	300,943	67.1	147,804	68,757	55,856	11,777
	10 mos.	93	2,705,183	418,124	3,558,095	390,334	483,921	138,754	1,575,403	2,810,995	79.0	747,100	354,968	181,092	20,546
Western of Alabama	Oct.	133	354,175	37,766	444,580	42,078	52,455	14,667	140,537	271,569	61.1	173,011	77,454	88,280	44,936
	10 mos.	133	2,763,015	403,249	3,500,996	442,493	551,495	141,349	1,387,169	2,729,690	78.0	771,306	414,246	322,831	242,836
Atlantic & Danville	Oct.	205	148,372	.....	152,311	34,000	7,302	7,512	42,458	102,396	67.2	49,915	7,908	18,450	—5,286
	10 mos.	205	1,149,520	.....	1,169,443	249,924	78,065	77,272	365,253	873,607	74.7	295,836	70,098	74,483	—61,509
Atlantic Coast Line	Oct.	5,499	9,112,559	1,025,835	10,908,391	2,386,464	2,031,747	296,361	4,128,064	9,308,562	85.3	1,599,829	1,400,000	228,079	220,381
	10 mos.	5,510	85,713,482	13,659,744	107,391,342	19,949,993	18,532,898	2,881,849	41,630,676	88,033,710	82.0	19,357,632	11,900,000	6,439,013	4,413,071
Charleston & Western Carolina	Oct.	343	393,421	4,504	409,059	92,250	71,617	16,162	157,398	348,104	85.1	60,955	30,000	33,114	21,050
	10 mos.	343	3,932,529	25,624	4,049,733	784,603	601,219	153,361	1,561,168	3,205,077	79.1	844,656	395,000	411,596	67,249
Baltimore & Ohio	Oct.	6,202	33,243,076	1,820,178	38,706,346	6,169,821	7,489,541	783,260	14,176,694	29,931,475	77.3	8,774,871	4,257,357	3,768,072	—114,543
	10 mos.	6,202	292,637,308	17,954,825	330,545,420	43,746,462	68,979,191	7,732,025	131,778,364	265,172,257	80.2	65,373,163	28,907,341	30,115,249	23,801,207
Staten Island Rapid Transit	Oct.	29	227,491	47,713	278,108	61,233	39,746	2,044	134,280	264,157	95.0	13,951	35,276	—34,513	—32,594
	10 mos.	29	1,856,949	484,058	2,376,152	448,035	377,622	15,578	1,261,778	2,331,917	98.1	44,235	331,704	—427,704	—460,971
Bangor & Aroostook	Oct.	602	567,997	32,071	687,997	182,150	205,194	11,403	203,072	650,786	94.6	37,211	63,420	21,132	16,542
	10 mos.	602	9,382,867	307,650	10,083,254	1,819,040	1,690,128	131,290	2,551,555	6,675,363	66.2	3,407,891	1,634,274	1,738,669	1,651,029
Bessemer & Lake Erie	Oct.	212	2,743,465	805	2,767,344	180,419	1,012,174	17,927	499,451	1,795,848	64.9	971,496	603,019	639,713	—194,548
	10 mos.	212	20,575,812	10,553	20,787,357	1,783,989	7,037,257	160,220	4,328,473	14,179,012	68.2	6,608,345	4,398,688	4,475,229	3,867,291
Boston & Maine	Oct.	1,711	6,207,832	954,712	7,882,021	1,228,237	1,069,423	104,338	3,070,174	5,778,230	73.3	2,103,791	1,003,084	706,863	446,340
	10 mos.	1,711	54,617,565	9,700,763	70,678,251	11,592,207	10,213,954	1,044,917	29,111,354	54,949,577	77.8	15,728,674	7,033,066	5,055,700	4,030,621
Cambria & Indiana	Oct.	35	141,127	.....	141,098	13,488	61,617	136	25,497	107,562	76.2	33,536	76,971	90,596	—38,349
	10 mos.	35	1,205,753	.....	1,206,375	139,153	717,045	6,539	223,205	1,217,415	100.9	—11,040	574,849	547,233	379,675
Canadian Pacific Lines in Maine	Oct.	234	293,563	41,200	367,484	129,889	65,308	7,552	143,719	359,359	97.8	8,125	25,546	—55,631	—85,653
	10 mos.	234	3,583,621	367,954	4,196,373	1,054,498	655,365	66,314	1,696,750	3,584,817	85.4	611,556	247,987	—200,899	—102,906
Canadian Pacific Lines in Vermont	Oct.	90	168,670	17,382	216,950	57,559	25,956	6,230	118,272	215,182	99.2	1,768	12,322	—69,196	—107,433
	10 mos.	90	1,571,389	135,670	1,889,443	665,507	234,321	53,962	1,067,233	2,087,439	110.5	—197,996	120,213	—838,058	—1,135,309
Central of Georgia	Oct.	1,815	3,050,658	172,606	3,483,608	578,221	559,436	110,984	1,514,855	2,931,945	84.2	551,663	214,408	264,088	139,866
	10 mos.	1,815	26,929,494	2,082,830	31,334,272	5,344,025	5,229,196	1,102,540	14,228,298	27,594,330	88.1	3,739,942	2,160,670	1,163,300	319,877
Central of New Jersey	Oct.	410	3,145,399	482,748	3,867,980	557,989	582,558	54,616	1,750,241	3,096,114	80.0	771,866	381,145	9,742	—438,433
	10 mos.	410	26,237,395	4,928,795	33,166,926	4,830,820	5,399,575	533,956	16,126,995	28,422,167	85.7	4,744,759	3,717,209	—2,321,971	—3,910,374
Central of Pennsylvania	Oct.	212	1,790,319	5,808	1,836,484	209,324	389,041	23,460	473,976	1,135,095	61.8	701,389	83,255	891,366	907,300
	10 mos.	212	15,819,688	88,203	16,253,788	1,703,743	3,356,737	233,127	4,603,714	10,286,421	63.3	5,967,367	717,273	8,058,136	7,179,501
Central Vermont	Oct.	422	906,000	44,000	1,018,000	177,947	175,138	16,535	398,930	811,563	79.7	206,437	48,975	101,275	—38,815
	10 mos.	421	7,609,000	560,000	8,736,000	1,579,073	1,444,500	154,055	3,600,903	7,141,721	81.8	1,594,279	460,037	543,392	81,921
Chesapeake & Ohio	Oct.	5,116	29,344,017	687,146	31,916,719	4,060,895	5,027,104	523,937	9,490,275	20,151,057	63.1	11,765,662	6,100,378	5,943,948	—2,338,938
	10 mos.	5,118	245,416,921	6,486,086	262,892,776	36,157,419	47,842,098	4,993,229	83,852,265	183,132,884	69.7	79,759,892	41,388,693	41,376,275	21,964,534
Chicago & Eastern Illinois	Oct.	886	2,428,055	213,154	2,923,026	340,600	388,535	102,261	966,593	1,931,058	66.1	991,968	320,000	517,484	90,970
	10 mos.	892	19,656,633	2,295,269	24,352,688	2,988,709	3,483,894	956,889	9,332,894	18,021,963	74.0	6,330,725	1,789,600	3,154,941	826,413
Chicago & Illinois Midland	Oct.	130	1,009,095	247	1,026,676	93,030	137,121	25,250	216,564	509,690	49.6	516,986	222,920	290,927	—119,535
	10 mos.	130	8,437,923	2,772	8,584,715	853,737	1,242,515	241,339	2,053,878	4,746,985	55.3	3,837,730	1,608,754	2,102,983	748,103
Chicago & North Western	Oct.	7,977	14,860,309	1,534,354	18,069,401	2,578,278	2,835,801	310,136	7,373,456	13,825,952	76.5	4,243,449	2,042,306	1,564,369	1,106,675
	10 mos.	8,016	121,140,271	17,056,407	153,674,941	24,652,893	28,329,727	3,102,451	68,830,833	132,186,245	86.0	21,488,696	11,473,611	5,877,132	296,317
Chicago, Burlington & Quincy	Oct.	8,830	21,418,893	1,371,640	24,888,617	3,172,883	2,664,087	412,451	7,521,043	14,474,616	58.2	10,414,001	4,653,519	5,050,307	2,956,862
	10 mos.	8,845	161,649,786	14,620,374	193,619,259	28,870,916	28,556,233	4,123,471	66,199,271	134,635,016	69.5	58,984,243	28,183,123	26,562,263	14,390,153
Chicago Great Western	Oct.	1,476	2,909,302	23,707	1,150,190	841,915	295,160	96,976	892,540	2,198,249	69.8	951,941	372,076	310,834	310,857
	10 mos.	1,478	25,230,529	189,460	27,347,428	6,294,853	2,991,201	959,716	8,394,620	19,349,341	70.8	7,998,087	2,598,875	2,986,393	2,023,685
Chicago, Indianapolis & Louisville	Oct.	541	1,785,743	76,443	1,978,929	267,117	246,405	81,774	608,354	1,292,835	65.3	686,094	263,055	325,959	277,071
	10 mos.	541	14,549,371	792,714	16,454,657	2,832,750	2,310,476	756,117	5,564,772	12,326,473	74.9	4,128,184	1,485,896	1,730,930	910,798
Chicago, Milwaukee, St. Paul & Pacific	Oct.	10,671	21,575,000	1,432,506	25,265,613	2,237,093	3,905,505	405,819	9,341,916	16,824,019	66.6	8,441,594	3,806,000	3,769,140	1,919,532
	10 mos.	10,671	173,349,730	14,382,627	207,094,780	28,315,089	37,385,637	4,174,612	86,434,071	165,180,668	79.8	41,914,112	21,275,000	15,701,392	9,058,971
Chicago, Rock Island & Pacific	Oct.	7,601	13,340,418	1,530,061	16,758,668	2,525,154	2,510,801	454,298	5,796,333	11,994,290	71.6	4,764,378	2,183,095	2,013,685	1,991,576
	10 mos.	7,612	119,504,588	14,609,250	146,369,952	19,679,099	23,768,972	4,402,485	53,357,019	108,001,977	73.8	38,367,975	16,706,538	14,908,778	16,339,288
Chicago, St. Paul, Minn. & Omaha	Oct.	1,617	2,882,192	163,980	3,255,663	454,272	350,875	57,445	1,404,841	2,386,047	73.3	869,616	190,466	426,592	456,565
	10 mos.	1,617	23,525,773	1,734,280	27,224,716	4,154,470	3,644,717	564,520	13,102,892	22,613,353	83.1	4,611,363	1,814,750	1,070,825	367,321
Clinchfield	Oct.	317	1,898,259	1,637	1,912,401	246,903	300,091	35,544	406,105	1,016,818	53.2	895,583	194,015	880,539	183,176
	10 mos.	317	16,814,320	19,643	16,933,887	2,225,133	2,961,619	339,740	3,817,463	9,639,258	56.9	7,294,629	1,721,506	6,835,826	3,626,903

(Continued on page 82)



N.C.&St.L. Two matched "Caterpillar" D4 Tractors and No. 40 Scrapers on ditching, banking and leveling work near Fosterville, Tenn.—using native earth and stone from own right-of-way for up to 50-ft. fills and 12-ft. shoulders. Loads average 7½ cu. yds.; hauls up to 1 mile. Tracks are kept open to normal traffic at all times. Section covered is nearly 40 miles (80 miles on both sides of track).

Stabilization costs take a nosedive

CATERPILLAR
REG. U. S. PAT. OFF.

DIESEL ENGINES
TRACTORS • MOTOR GRADERS
EARTHMOVING EQUIPMENT

WHERE is the railroad that wouldn't like to fortify further its roadbed banks and shoulders—improve drainage—level and clean up the right-of-way? . . . not only toward more efficient operation, but for visualizing a progressiveness that wins public appreciation and increases patronage.

But there's usually that IF—*"if only the cost could be brought down!"* It can, with "Caterpillar's" help. "Caterpillar" has been leading the way in bringing about many long-delayed economic improvements—with power equipment that has revolutionized earthmoving methods and swept away the bogey of high costs.

Today, the very latest of such equipment is being placed at railroading's door. The picture shows an example in two matched tractor-scraper units that can do an amazing day's volume of work along your right-of-way. They're doing it for the N.C.&St.L. in a way that brings these enthusiastic comments from Construction Supervisor R. O. Corbitt:

> "Our 'Cat' D4 Tractors and No. 40 Scrapers are already paying for themselves in the short time we've had them. They're doing better and more work than any other equipment we've ever had on the job—and it's at least 75% cheaper than costly hand shovel methods. I like the rear wheel adjustment that raises scraper pan to clear tracks at road crossings. 'Caterpillar' dealer service is very good."

CATERPILLAR TRACTOR CO. • PEORIA, ILLINOIS

REVENUES AND EXPENSES OF RAILWAYS

H OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1950

Name of road		Av. mileage operated during period	Operating revenues			Operating Expenses					Operating ratio	Net from railway operation	Railway tax accruals	Net railway operating income	
						Maintenance of									
			Freight	Passenger	Total (inc. misc.)	Way and structures	Equipment	Traffic	Transportation	Total				1950	1949
Colorado & Southern	Oct.	740	1,358,734	87,446	1,553,443	190,900	160,988	25,348	515,496	942,838	60.7	610,605	284,182	255,468	63,858
	10 mos.	742	10,024,310	738,975	11,635,587	1,701,196	1,616,646	248,430	4,055,807	8,115,265	69.8	3,520,322	1,752,781	1,184,397	707,273
Ft. Worth & Denver City	Oct.	1,130	1,634,534	151,842	1,922,151	225,775	196,432	50,858	650,564	1,206,828	62.8	715,323	251,507	322,001	228,123
	10 mos.	1,016	13,260,762	1,262,188	15,671,551	2,163,191	1,953,603	482,468	5,265,132	10,627,522	67.8	5,044,029	1,730,458	2,245,169	1,663,776
Colorado & Wyoming	Oct.	41	148,962	.....	259,855	24,802	20,444	1,005	91,625	148,085	57.0	111,770	62,227	48,330	—199
	10 mos.	41	1,172,173	.....	1,982,643	190,144	206,940	9,101	787,967	1,290,230	65.1	692,413	409,371	280,462	335,422
Columbus & Greenville	Oct.	168	177,662	850	187,433	41,986	28,601	3,521	53,470	144,776	77.2	42,657	29,275	17,821	17,750
	10 mos.	168	1,504,266	766	1,570,581	436,647	303,476	45,888	497,937	1,456,019	92.7	114,562	132,546	8,148	108,623
Delaware & Hudson	Oct.	793	5,188,298	168,195	5,492,539	654,075	968,858	72,433	1,804,379	3,674,531	66.9	1,818,008	923,407	931,791	555,356
	10 mos.	794	42,176,830	1,654,986	45,035,800	5,911,131	9,516,130	717,671	17,355,619	35,221,095	78.2	9,814,705	5,135,415	4,823,463	3,121,665
Delaware, Lackawanna & Western	Oct.	966	6,225,889	786,697	7,673,249	813,385	1,213,260	156,860	3,259,156	5,675,154	74.0	1,998,095	990,725	972,333	749,910
	10 mos.	967	53,209,154	8,088,170	66,764,269	7,891,251	11,494,306	1,536,798	29,550,920	52,818,219	79.1	13,946,050	7,123,137	6,677,374	5,513,166
Denver & Rio Grande Western	Oct.	2,400	6,561,986	255,451	7,244,107	730,296	1,090,954	157,353	2,209,916	4,445,350	61.4	2,798,757	1,242,686	1,565,069	847,766
	10 mos.	2,411	48,235,131	2,540,110	53,026,425	6,698,965	9,849,836	1,469,829	18,458,991	38,926,783	73.4	14,099,642	6,956,672	7,350,388	6,783,516
Detroit & Mackinac	Oct.	232	230,086	352	248,514	35,000	20,821	3,650	42,792	113,489	45.7	135,025	60,750	64,895	67,899
	10 mos.	232	1,725,021	6,402	1,818,581	315,000	194,561	19,394	338,010	943,917	51.9	874,664	371,422*	473,421	351,186
Detroit & Toledo Shore Line	Oct.	50	647,093	.....	650,972	72,832	56,330	13,768	192,298	346,085	53.2	304,887	110,268	96,740	45,581
	10 mos.	50	6,152,979	.....	6,179,501	652,911	518,939	136,265	1,889,421	3,312,206	53.6	2,867,295	915,003	959,287	736,642
Detroit, Toledo & Ironton	Oct.	464	1,483,542	342	1,551,259	185,430	162,876	25,382	386,998	798,084	51.4	753,175	314,772	381,595	190,989
	10 mos.	464	14,405,020	3,829	14,899,836	1,636,140	2,353,082	243,628	3,938,377	8,547,801	57.4	6,352,035	2,619,312	3,064,618	2,361,148
Duluth, Missabe & Iron Range	Oct.	560	5,681,649	1,073	6,675,161	547,673	559,781	9,995	1,750,990	2,940,606	44.1	3,734,555	1,890,610	1,795,919	—897,011
	10 mos.	562	35,304,817	17,649	41,405,141	5,484,884	5,410,083	80,679	11,371,568	23,028,526	55.6	18,376,615	9,607,002	8,513,566	7,645,381
Duluth, South Shore & Atlantic	Oct.	539	629,413	6,675	739,266	108,854	97,796	19,795	240,346	491,263	66.5	248,003	27,353	157,985	—105,941
	10 mos.	539	5,446,936	75,232	5,894,546	1,123,751	973,774	189,304	2,147,548	4,596,156	78.0	1,298,390	256,224	758,234	—394,216
Duluth, Winnipeg & Pacific	Oct.	175	386,000	700	394,700	72,980	40,778	4,472	164,008	288,215	73.0	106,485	31,250	7,257	9,310
	10 mos.	175	3,552,000	14,400	3,620,800	671,016	443,804	41,733	1,525,655	2,744,077	75.8	876,723	284,244	130,206	—298,790
Elgin, Joliet & Eastern	Oct.	238	3,855,002	1	4,648,886	382,868	570,726	27,963	1,401,738	2,512,585	54.0	2,136,301	841,326	855,842	—2,170
	10 mos.	238	33,643,678	19	40,650,654	2,952,754	5,102,644	266,710	12,631,821	22,111,655	54.4	18,538,999	7,509,178	7,701,655	5,080,123
Erie	Oct.	2,228	14,469,598	559,999	16,504,828	1,966,846	2,185,155	319,903	6,092,590	11,178,809	67.7	5,326,019	2,344,349	2,405,551	1,204,997
	10 mos.	2,230	121,635,712	5,969,707	136,791,799	16,798,478	20,546,509	3,118,107	54,784,327	101,144,175	73.9	35,647,624	15,620,952	15,716,526	8,178,550
Florida East Coast	Oct.	571	1,273,871	266,521	1,883,247	534,163	448,112	63,577	673,477	1,861,630	98.9	21,617	149,277	—190,688	—262,273
	10 mos.	571	14,867,360	5,263,852	22,217,106	4,309,102	3,952,521	628,330	7,876,820	18,411,529	82.9	3,805,577	1,510,150	1,150,595	—407,668
Georgia Railroad	Oct.	326	792,545	35,914	918,703	90,349	92,359	28,308	311,294	555,506	60.5	363,197	34,999	336,631	80,005
	10 mos	326	6,336,005	303,598	7,161,268	911,047	1,034,677	270,029	2,965,849	5,505,056	76.9	1,656,212	340,306	1,487,099	710,901
Georgia & Florida	Oct	359	257,579	12	261,357	74,857	32,842	18,121	80,317	222,733	85.2	38,624	15,797	1,238	—38,025
	10 mos.	398	2,405,126	90	2,436,247	639,938	317,194	156,381	954,023	2,197,248	90.2	238,999	158,012	—75,973	—290,254
Grand Trunk Western	Oct.	974	4,903,000	212,000	5,529,000	806,205	769,591	70,421	2,008,770	3,804,063	68.8	1,724,937	359,484	1,124,135	233,074
	10 mos.	972	42,107,000	1,898,000	47,009,000	6,818,160	7,575,639	658,497	19,190,974	35,745,721	76.0	11,263,279	2,261,022	6,742,327	2,588,593
Canadian Natl. Lines in New Eng.	Oct.	172	197,000	7,000	240,000	67,090	49,880	2,898	135,329	271,861	113.3	—31,861	22,478	—91,041	—77,511
	10 mos.	172	1,583,000	82,800	2,000,000	639,088	445,188	27,645	1,211,871	2,454,133	122.7	—454,133	224,780	—1,045,562	—1,201,397
Great Northern	Oct.	8,316	25,189,976	1,052,584	27,944,574	3,029,407	3,168,944	323,224	7,331,447	14,510,128	51.9	13,434,446	6,135,024	6,735,409	3,190,276
	10 mos.	8,316	157,160,668	9,050,603	179,648,565	31,717,258	30,760,099	3,243,789	61,736,007	133,870,938	74.5	45,777,627	24,514,441	18,557,122	18,527,810
Green Bay & Western	Oct.	224	333,157	.....	340,587	62,912	42,025	18,403	74,792	218,005	64.0	122,582	49,811	49,997	37,845
	10 mos.	224	3,088,696	—13	3,156,506	596,490	402,568	190,728	783,113	2,110,761	66.9	1,045,745	428,542	456,328	93,801
Gulf, Mobile & Ohio	Oct.	2,898	6,693,305	372,697	7,571,493	1,065,301	1,305,017	236,350	2,059,558	4,961,967	65.5	2,609,526	1,090,785	1,167,907	695,215
	10 mos.	2,898	54,689,332	3,974,749	63,281,246	9,424,659	11,498,474	2,262,864	19,317,116	45,445,196	71.8	17,836,050	8,589,387	6,423,685	5,859,204
*Illinois Central	Oct.	6,543	22,505,272	1,913,515	26,772,162	3,835,319	4,207,487	444,635	8,479,005	17,882,132	66.8	8,890,030	4,620,748	4,154,560	2,969,961
	10 mos.	6,543	183,116,303	17,613,739	222,108,458	35,522,709	38,191,764	4,382,648	79,332,778	166,478,240	75.0	55,630,218	29,542,320	24,410,868	19,752,494
*Illinois Terminal	Oct.	462	998,622	87,542	1,256,927	151,164	136,432	37,599	405,391	782,206	62.2	474,721	239,468	199,896	124,820
	10 mos.	462	7,993,482	902,378	10,064,887	1,415,235	1,306,795	360,238	3,899,753	7,455,575	74.1	2,609,312	1,301,177	1,094,209	1,088,232
Kansas City Southern	Oct.	891	3,056,333	168,828	3,575,844	371,926	462,810	94,358	973,489	2,019,815	56.5	1,556,029	615,000	707,503	831,519
	10 mos.	891	28,162,529	1,099,655	32,359,530	3,094,022	4,069,895	893,529	9,331,648	18,482,066	57.1	13,877,464	5,189,000	6,793,807	7,605,495
Kansas, Oklahoma & Gulf	Oct.	327	560,843	620	564,828	62,172	30,733	16,803	115,726	245,523	43.5	319,305	146,796	148,004	17,123
	10 mos.	327	4,428,313	6,177	4,470,221	509,949	367,470	168,702	1,113,222	2,347,479	52.5	2,122,742	951,724	912,030	668,887
Lake Superior & Ishpeming	Oct.	156	397,088	30	477,854	135,513	138,188	1,890	97,146	186,421	39.0	291,433	142,638	154,905	—123,957
	10 mos.	156	2,602,097	354	3,191,750	452,641	436,876	18,077	778,235	1,791,835	56.1	1,399,915	794,110	667,979	763,460
Lehigh & Hudson River	Oct.	96	295,001	.....	295,752	30,731	30,714	9,257	89,221	169,027	57.2	126,725	54,101	52,572	7,808
	10 mos.	96	2,499,802	.....	2,505,293	348,331	256,703	89,807	913,762	1,694,935	67.7	810,358	334,094	265,625	100,380
Lehigh & New England	Oct.	191	897,277	.....	905,482	69,858	112,591	10,186	197,591	419,569	46.3	485,913	226,415	281,486	213,570
	10 mos.	191	6,996,754	.....	7,052,348	754,389	1,094,518	115,778	1,666,542	3,932,082	55.8	3,120,266	1,601,772	1,871,471	1,363,406
Lehigh Valley	Oct.	1,240	6,340,064	272,960	6,910,264	808,338	1,048,886	138,114	2,476,867	4,698,424	68.0	2,211,840	975,532	1,083,141	592,661
	10 mos.	1,249	53,353,154	2,933,391	58,856,200	7,336,316	10,007,111	1,332,270	23,567,702	44,513,675	75.6	14,342,525	6,083,682	6,736,873	4,628,162
Long Island	Oct.	365	1,270,171	2,835,446	4,356,637	575,272	743,716	11,073	2,162,047	3,649,525	83.8	707,112	437,285	—25,287	—198,089
	10 mos.	365	11,425,393	28,045,186	41,402,881	5,651,562	7,331,222	175,282	20,280,405	34,659,225	83.7	6,743,656	4,495,463	—552,803	—2,441,538

*Due to a printer's error, the names of these two railroads were inadvertently reversed in this table for September and nine months of 1950 (*Railway Age*, November 18, page 90). In referring to that table, therefore, figures given for the Illinois Central should be read as applying to the Illinois Terminal, and vice versa.

(Continued on page 84)

WORLD-WIDE SALES AND SERVICE OF HYSTER TRACTOR EQUIPMENT BY MORE THAN 400 "CATERPILLAR" DEALERS

"Caterpillar" dealers around the globe are Hyster tractor equipment sales *and service* stations. They *sell* the right tool for the job. Their factory-trained mechanics *service* the equipment when required. They supply genuine Hyster parts from well equipped stocks.

Hyster has made tractor tools for use with "Caterpillar" track-type tractors for more than twenty years; will continue to design and build quality products for the world's toughest work assignments.

See your "Caterpillar" dealer for information about Hyster Tractor Equipment, or write for literature.

HYSTER® COMPANY

Manufacturer of 29 Tools for "Caterpillar" Track-Type Tractors

2932 N. E. CLACKAMAS, PORTLAND 8, OREGON
1832 NORTH ADAMS ST., PEORIA 1, ILLINOIS

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1950

Name of road		Av. mileage operated during period	Operating revenues			Operating Expenses					Operating ratio	Net from railway operation	Railway tax accruals	Net railway operating income	
						Maintenance of									
			Freight	Passenger	Total (inc. misc.)	Way and structures	Equipment	Traffic	Transportation	Total				1950	1949
Louisiana & Arkansas	Oct.	756	1,957,200	61,300	2,087,594	348,934	191,042	50,825	526,591	1,175,183	56.3	912,411	477,530	317,919	313,947
	10 mos.	756	16,127,350	657,227	17,558,715	2,343,620	1,828,282	472,032	4,996,255	10,202,809	58.1	7,355,906	3,147,292	3,230,198	2,697,427
Louisville & Nashville	Oct.	4,778	17,677,951	1,003,778	20,749,997	1,859,371	3,458,293	292,766	6,492,609	12,674,764	61.1	8,075,233	4,593,755	4,153,044	222,524
	10 mos.	4,779	145,766,329	10,081,266	165,930,287	21,847,333	32,563,541	2,998,339	62,688,631	125,741,929	75.8	40,188,358	26,552,475	20,750,973	10,395,766
Maine Central	Oct.	981	1,711,317	108,908	1,959,616	457,506	351,295	18,026	715,131	1,613,059	82.3	346,557	204,463	148,845	192,093
	10 mos	981	17,161,368	1,369,025	19,832,647	3,943,549	3,604,684	183,006	7,140,502	15,555,076	78.4	4,277,571	2,222,770	1,764,393	1,855,471
Midland Valley	Oct.	334	205,744	3	210,218	50,321	15,188	3,723	57,816	134,539	64.0	75,679	18,394	41,338	27,266
	10 mos.	334	1,681,958	43	1,714,174	422,562	156,005	37,460	552,705	1,242,859	72.5	471,315	180,196	170,550	136,205
Minneapolis & St. Louis	Oct.	1,416	2,103,872	7,907	2,238,301	322,834	257,272	105,973	571,947	1,358,273	60.7	880,028	387,905	376,828	208,032
	10 mos.	1,416	16,431,011	71,762	17,048,855	2,842,537	2,478,930	1,068,159	5,160,643	12,501,587	73.3	4,547,268	2,188,146	1,929,957	1,015,447
Minneapolis, St. Paul & S. S. Marie	Oct.	3,224	4,627,045	77,813	5,505,778	661,478	562,903	68,941	1,482,368	2,889,081	52.5	2,616,697	1,283,897	1,078,045	234,527
	10 mos.	3,224	28,685,296	913,380	31,792,901	6,491,507	5,194,751	671,179	12,490,815	25,950,300	81.6	5,842,601	3,400,689	1,914,565	1,923,630
Mississippi Central	Oct.	148	219,194	—124	223,646	47,782	30,173	13,194	60,136	160,655	71.8	62,991	22,614	26,605	18,201
	10 mos.	148	1,936,164	—19	1,977,047	429,319	254,079	124,798	523,301	1,419,692	71.8	557,355	237,047	205,660	116,335
Missouri-Illinois	Oct.	172	493,448	217	498,139	77,448	55,489	8,553	109,773	259,877	52.2	238,262	113,936	124,104	92,920
	10 mos.	172	3,828,907	2,306	3,858,530	633,633	531,629	75,241	992,189	2,311,312	59.9	1,547,218	827,675	704,712	754,231
Missouri-Kansas-Texas Lines	Oct.	3,243	5,939,389	473,921	7,411,001	985,782	1,002,011	229,307	2,385,617	4,925,922	66.5	2,485,079	1,169,184	1,054,925	1,049,206
	10 mos.	3,247	54,002,550	3,606,325	63,327,162	9,391,677	8,847,936	2,230,730	22,329,835	45,632,907	72.1	17,694,255	7,677,998	7,048,712	6,188,109
Missouri Pacific	Oct.	6,960	18,065,459	851,932	20,703,954	3,322,932	3,485,348	413,660	6,804,783	14,606,385	70.6	6,097,569	2,378,166	3,181,253	On strike
	10 mos.	6,966	152,258,753	8,867,594	176,583,683	27,248,810	30,132,416	4,080,526	64,637,182	131,705,453	74.6	44,878,230	16,845,960	22,451,457	On strike
Gulf Coast Lines	Oct.	1,711	3,151,021	85,701	3,440,989	607,982	538,442	66,443	1,089,422	2,428,564	29.4	1,012,425	363,056	487,002	350,824
	10 mos.	1,711	31,252,275	805,145	33,741,268	5,959,787	4,862,097	744,799	11,006,040	23,833,377	70.6	9,907,891	2,986,342	4,404,415	4,458,402
International-Great Northern	Oct.	1,089	2,592,002	181,736	3,019,851	594,370	508,232	51,395	1,120,253	2,399,459	79.5	620,392	174,917	281,887	76,857
	10 mos.	1,099	23,175,469	1,743,571	27,362,256	5,107,726	4,578,664	507,810	10,541,283	22,096,148	80.8	5,266,108	1,409,564	2,459,696	1,879,693
Monongahela	Oct.	170	620,280	378	624,616	65,823	82,957	1,036	259,450	414,797	66.4	209,819	36,599	19,029	—146,850
	10 mos.	170	4,926,703	5,340	4,970,469	682,192	654,681	9,818	1,904,863	3,310,144	66.6	1,660,325	307,631	292,811	369,937
Montour	Oct.	51	311,785	.....	312,232	23,055	88,752	774	90,853	213,147	68.3	99,085	75,686	79,268	1,482
	10 mos.	51	2,295,884	.....	2,300,055	282,167	695,540	8,519	735,074	1,814,706	78.9	485,349	477,600	496,095	492,282
Nashville, Chatt. & St. Louis	Oct.	1,049	2,727,059	140,431	3,454,607	541,114	362,581	103,712	1,023,979	2,145,431	62.1	1,309,176	626,434	718,751	298,223
	10 mos.	1,049	24,806,431	1,426,911	29,159,882	4,949,642	3,949,801	1,020,671	10,389,069	21,374,725	73.3	7,785,157	3,895,033	3,857,617	2,596,495
New York Central	Oct.	10,733	54,116,537	9,557,355	71,587,516	9,151,193	13,176,544	1,038,653	30,857,530	57,154,998	79.8	14,432,518	7,127,292	5,582,408	394,329
	10 mos.	10,733	450,609,697	94,713,564	611,146,341	72,035,363	128,101,758	10,053,412	273,495,256	512,112,773	83.8	99,033,568	51,379,019	30,538,582	21,026,887
Pittsburgh & Lake Erie	Oct.	221	3,810,696	70,857	4,067,158	509,652	1,001,792	65,884	1,369,053	3,168,320	77.9	898,838	912,089	579,402	—480,880
	10 mos.	221	32,505,662	734,273	34,566,728	3,876,443	8,971,516	676,021	12,051,919	27,479,625	79.5	7,087,103	6,248,232	6,426,883	4,711,151
New York, Chicago & St. Louis	Oct.	2,192	13,235,203	131,489	13,968,369	1,176,714	2,010,829	289,689	4,343,029	8,226,889	58.9	5,741,480	2,575,551	2,819,314	898,449
	10 mos.	2,192	114,837,926	1,451,029	120,163,214	13,718,570	18,404,468	2,847,925	39,733,343	78,640,043	65.4	41,523,171	18,060,634	20,612,790	14,892,079
New York, New Haven & Hartford	Oct.	1,795	8,478,271	3,738,262	13,465,966	1,907,699	2,006,860	171,758	5,367,434	10,070,112	74.8	3,395,854	1,485,000	1,240,772	695,048
	10 mos.	1,795	73,648,752	38,550,137	122,938,240	17,289,080	18,547,932	1,937,671	51,065,062	95,299,631	77.5	27,638,609	10,567,000	8,663,499	7,191,547
New York Connecting	Oct.	21	265,002	.....	284,854	89,092	22,280	.....	60,645	174,549	61.3	110,305	65,209	61,065	—49,757
	10 mos.	21	2,419,588	.....	2,538,794	742,702	193,954	.....	591,270	1,552,861	61.2	985,933	626,699	524,100	99,750
New York, Ontario & Western	Oct.	544	655,381	—831	712,913	118,204	82,611	27,258	285,825	542,784	76.1	170,129	38,896	54,891	—33,625
	10 mos.	544	5,497,579	107,082	5,957,188	1,070,165	866,267	253,706	2,816,035	5,294,979	88.9	662,209	385,215	—460,719	—617,777
New York, Susquehanna & Western	Oct.	120	420,166	38,264	477,661	43,069	84,014	6,860	187,549	350,800	73.4	126,861	36,869	52,691	12,132
	10 mos.	120	3,721,734	382,587	4,246,024	461,448	536,373	64,475	1,774,982	3,101,762	73.1	1,144,262	331,865	446,134	187,107
Norfolk & Western	Oct.	2,127	15,636,409	424,224	16,594,092	2,102,072	2,824,478	283,481	4,570,042	10,303,557	62.1	6,290,535	4,062,116	3,483,297	—1,162,849
	10 mos.	2,128	127,952,717	3,764,349	136,623,994	20,298,730	27,681,351	2,586,865	41,166,700	96,918,486	70.9	39,705,508	26,765,022	23,300,533	16,311,197
Norfolk Southern	Oct.	673	873,814	36	898,923	169,295	108,999	45,685	275,328	667,181	74.2	231,742	105,681	92,330	48,189
	10 mos.	676	7,468,340	1,428	7,659,053	1,537,398	992,643	429,330	2,505,940	6,070,528	79.3	1,588,525	718,968	577,226	482,183
Northern Pacific	Oct.	6,903	18,606,872	514,547	20,195,967	2,229,255	2,502,070	250,011	5,396,096	10,994,876	54.4	9,201,091	4,484,995	4,960,603	1,771,631
	10 mos.	6,897	119,823,943	4,952,722	133,929,624	21,255,254	24,828,200	2,531,138	47,481,272	101,978,268	76.1	31,951,356	19,750,285	16,188,425	9,355,638
Northwestern Pacific	Oct.	331	857,243	6,369	894,937	185,834	105,016	4,119	368,029	677,629	75.7	217,308	95,275	62,491	78,066
	10 mos.	331	8,251,877	50,063	8,638,289	1,814,312	911,389	45,236	3,664,627	6,568,411	76.0	2,069,878	871,852	569,568	76,604
Oklahoma City-Ada-Atoka	Oct.	132	90,023	5	91,040	22,459	2,724	1,404	21,146	51,427	56.5	39,613	23,133	4,792	541
	10 mos.	132	794,898	5	806,325	223,041	39,463	14,066	214,801	530,349	65.8	275,976	119,297	34,750	73,652
Pennsylvania	Oct.	10,117	67,645,740	11,975,613	87,977,156	10,929,497	22,609,261	1,126,716	36,169,009	73,933,960	84.0	14,043,196	7,183,198	5,273,665	—1,418,962
	10 mos.	10,118	566,103,202	116,295,103	749,239,469	94,083,535	177,391,476	11,229,938	317,727,500	629,164,260	84.0	120,075,209	57,090,437	47,845,394	29,945,003
Pennsylvania-Reading Seashore Lines	Oct.	386	601,353	130,317	768,822	147,496	71,361	10,511	552,389	809,256	105.3	—40,434	91,361	—261,717	—383,349
	10 mos.	386	5,257,734	2,324,159	7,848,198	1,655,227	1,508,163	113,880	5,644,228	9,247,864	117.8	—1,399,666	907,532	—3,602,691	—3,740,932

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1950

Name of road		Av. mileage operated during period	Operating revenues			Operating Expenses					Operating ratio	Net from railway operation	Railway tax accruals	Net railway operating income	
						Maintenance of									
			Freight	Passenger	Total (inc. misc.)	Way and structures	Equipment	Traffic	Transportation	Total				1950	1949
Pittsburg & Shawmut	Oct.	97	223,072	.....	223,649	47,716	71,299	5,615	55,242	189,162	84.6	34,487	8,257	22,697	21,323
	10 mos.	97	2,124,403	.....	2,130,661	435,173	478,652	30,928	530,981	1,569,141	73.6	561,520	171,883	346,101	291,489
Pittsburgh & West Virginia	Oct.	132	793,826	.....	804,536	168,487	162,647	42,615	198,938	603,179	75.0	201,357	105,124	142,958	30,139
	10 mos.	132	6,889,067	.....	7,077,833	1,448,615	1,444,603	413,383	1,768,344	5,417,449	76.5	1,660,384	818,989	1,168,740	968,718
Reading	Oct.	1,317	10,210,618	555,470	11,572,975	1,932,978	2,148,840	136,358	4,239,282	8,768,373	75.8	2,804,602	1,385,752	1,458,150	779,724
	10 mos.	1,317	86,785,968	5,421,951	97,288,972	14,192,465	19,903,447	1,314,030	37,834,420	76,189,499	78.3	21,099,473	10,037,217	10,741,730	7,658,542
Richmond, Fredericksburg & Potomac	Oct.	118	1,248,081	362,904	1,960,050	338,676	265,480	19,265	595,960	1,322,002	67.4	638,048	321,139	249,764	63,225
	10 mos.	118	12,082,307	4,753,926	19,298,599	2,503,149	2,699,777	183,809	6,257,815	12,772,911	66.2	6,525,688	2,970,724	2,665,583	595,915
Rutland	Oct.	407	422,873	35,100	527,676	75,892	85,802	13,767	272,460	466,723	88.4	60,953	32,359	—1,392	15,229
	10 mos.	407	3,770,714	314,156	4,751,599	724,722	810,210	140,231	2,524,873	4,378,054	92.1	373,545	291,068	—118,277	—384,093
Sacramento Northern	Oct.	271	357,862	164	370,958	55,286	17,716	2,827	96,532	180,454	48.6	190,504	90,581	70,774	21,132
	10 mos.	271	2,616,701	1,233	2,681,876	527,569	166,600	22,151	804,253	1,597,093	59.6	1,084,783	440,746	452,561	—156,828
St. Louis-San Francisco	Oct.	4,635	9,509,445	597,528	10,833,850	1,515,114	1,594,972	251,516	3,561,488	7,272,635	67.1	3,561,215	1,777,051	1,908,871	1,558,793
	10 mos.	4,637	81,317,406	4,801,063	92,508,196	14,738,119	15,257,956	2,352,106	33,639,308	69,942,268	75.6	22,565,928	11,804,505	11,384,403	8,077,916
St. Louis, San Francisco & Texas	Oct.	159	352,155	11,999	387,187	52,610	34,784	16,283	151,263	265,419	68.6	121,768	38,205	36,213	45,259
	10 mos.	159	3,179,507	93,334	3,475,548	495,860	333,627	153,754	1,363,455	2,447,738	70.4	1,027,810	263,829	250,773	307,686
St. Louis Southwestern Lines	Oct.	1,569	5,955,478	51,816	6,248,048	542,601	587,012	136,636	1,695,304	3,124,461	50.0	3,123,587	1,499,674	1,414,406	1,317,110
	10 mos.	1,569	48,830,136	487,682	51,648,691	6,151,184	5,761,170	1,396,321	15,286,994	30,284,276	58.6	21,364,415	9,276,856	9,938,227	7,938,965
Seaboard Air Line	Oct.	4,146	9,406,531	962,828	11,213,504	1,990,422	1,829,714	318,657	3,710,423	8,289,884	73.9	2,923,620	1,476,474	1,324,069	767,184
	10 mos.	4,146	90,285,614	11,680,813	109,617,927	17,082,105	18,628,488	3,151,459	38,025,228	81,593,822	74.4	28,024,105	12,899,986	13,044,113	8,785,270
Southern Ry	Oct.	6,347	19,308,668	1,367,067	22,188,824	2,711,532	3,669,770	356,451	7,484,816	15,039,057	67.8	7,149,767	3,439,238	3,132,364	1,455,092
	10 mos.	6,347	164,300,194	14,091,382	191,488,449	25,771,615	34,726,951	3,454,102	67,577,331	139,240,333	72.7	52,248,116	25,679,332	23,362,488	16,281,028
Alabama Great Southern	Oct.	316	1,535,605	65,494	1,733,475	149,424	322,145	34,026	547,013	1,109,520	64.0	623,955	331,283	302,233	155,390
	10 mos.	316	12,393,266	904,807	14,411,630	1,996,719	2,948,493	277,149	4,902,104	10,684,200	74.1	3,727,430	2,274,663	1,637,292	1,279,147
Cinn., New Orleans & Texas Pacific	Oct.	337	3,605,534	155,273	3,919,859	409,038	650,057	64,999	934,815	2,164,914	55.2	1,754,945	898,453	971,886	470,885
	10 mos.	337	30,304,831	1,760,065	33,638,073	3,977,448	5,849,502	592,825	9,361,847	20,867,821	62.0	12,770,252	6,516,058	6,622,445	5,228,592
Georgia Southern & Florida	Oct.	397	553,130	53,775	656,162	144,580	65,126	7,291	193,369	426,513	65.0	229,649	58,047	61,273	26,449
	10 mos.	397	5,039,782	734,315	6,296,514	1,377,064	578,413	70,583	2,006,120	4,214,529	66.9	2,081,985	497,304	480,400	404,357
New Orleans & Northeastern	Oct.	204	1,120,057	51,371	1,220,331	134,399	113,462	18,748	253,933	560,697	45.9	659,634	308,190	288,984	168,493
	10 mos.	204	8,894,990	543,620	9,915,504	1,427,964	974,452	163,733	2,281,592	5,237,731	52.8	4,677,773	2,240,795	1,945,202	1,498,545
Southern Pacific	Oct.	8,144	38,926,260	3,197,577	44,884,127	4,663,809	8,701,902	753,578	15,145,900	31,103,586	69.3	13,780,541	6,865,195	5,719,568	3,410,903
	10 mos.	8,143	328,100,484	31,869,955	389,465,329	43,147,579	75,513,697	7,091,580	140,203,298	283,985,094	72.9	105,480,235	52,313,458	38,929,588	23,772,141
Texas & New Orleans	Oct.	4,316	10,646,946	750,533	12,200,093	1,789,376	1,638,517	217,834	4,274,093	8,418,556	69.0	3,781,537	1,564,979	1,433,222	1,178,920
	10 mos.	4,316	90,238,487	6,661,725	104,925,491	16,615,114	15,050,061	2,183,741	37,759,174	76,261,161	72.7	28,664,330	12,132,078	10,323,864	10,469,511
Spokane International	Oct.	152	200,221	1,285	226,456	49,952	23,470	6,140	52,809	112,948	63.1	83,508	17,467	51,764	—22,512
	10 mos.	152	1,808,459	9,888	1,958,333	409,097	185,865	44,852	519,948	1,250,769	63.8	707,564	178,477	374,545	9,561
Spokane, Portland & Seattle	Oct.	931	2,860,452	72,473	3,061,345	472,447	272,317	21,934	744,757	1,589,591	51.9	1,471,754	169,236	1,227,684	402,070
	10 mos.	943	20,162,429	790,308	22,086,286	4,303,065	2,640,212	212,039	6,952,477	14,890,820	67.4	7,195,466	1,661,553	4,842,575	2,454,098
Tennessee Central	Oct.	286	426,460	19,602	485,282	86,850	85,276	10,629	137,515	338,185	69.7	147,097	26,965	87,413	33,636
	10 mos.	286	3,661,368	51,921	3,923,512	731,298	581,192	101,150	1,302,655	2,892,782	73.7	1,030,730	247,018	470,938	291,890
Texas & Northern	Oct.	8	103,861	.....	120,527	2,593	8,545	886	25,814	41,373	34.3	79,154	28,492	36,832	10,525
	10 mos.	8	892,842	.....	1,011,470	28,719	55,813	7,743	185,428	316,634	31.3	694,836	244,356	328,495	191,849
Texas & Pacific	Oct.	1,846	5,745,295	395,160	7,612,085	778,768	1,003,297	166,067	1,982,413	4,211,960	55.3	3,400,125	1,109,992	2,077,109	460,093
	10 mos.	1,846	48,403,268	3,922,373	58,012,974	7,900,056	8,715,766	1,559,625	19,226,665	40,199,093	69.3	17,813,881	6,985,017	7,782,836	5,317,458
Texas Mexican	Oct.	162	275,195	.....	310,514	50,992	19,245	6,759	54,804	149,299	48.1	161,215	70,838	67,692	10,936
	10 mos.	162	2,534,533	.....	2,818,949	543,161	221,437	63,177	570,883	1,559,641	55.3	1,259,308	533,076	486,753	379,935
Toledo, Peoria & Western	Oct.	239	562,111	2	572,878	71,345	31,918	36,125	119,728	284,978	49.7	287,900	122,547	124,848	61,090
	10 mos.	239	4,560,449	127	4,640,848	687,773	314,520	361,839	1,050,552	2,653,136	57.2	1,987,712	774,359	833,805	568,028
Union Pacific	Oct.	9,720	41,864,797	2,663,638	47,582,790	4,879,965	7,877,495	815,552	15,014,590	30,533,704	64.2	17,049,086	8,447,275	6,651,978	4,120,979
	10 mos.	9,720	317,555,540	27,823,010	372,666,754	51,124,088	64,983,823	7,936,896	126,241,953	268,982,074	72.2	103,684,680	55,581,779	33,053,917	12,515,984
Utah	Oct.	110	143,666	.....	144,044	10,322	57,305	742	65,572	141,130	98.0	2,914	11,586	6,978	11,542
	10 mos.	110	1,168,555	.....	1,172,505	181,414	479,132	7,040	524,075	1,264,716	107.9	—92,211	116,203	—96,257	—228,391
Virginian	Oct.	643	3,375,833	2,432	3,452,325	401,521	624,063	37,971	705,478	1,848,571	53.5	1,603,754	885,000	1,036,682	—288,593
	10 mos.	652	26,404,678	25,695	26,974,186	3,561,111	5,624,857	371,804	6,098,497	16,417,463	60.9	10,556,723	5,795,100	7,220,525	4,798,894
Wabash	Oct.	2,393	9,464,899	423,713	10,889,679	1,142,029	1,169,144	259,317	3,728,590	6,639,229	61.0	4,250,450	1,869,215	1,988,061	1,247,168
	10 mos.	2,393	75,792,901	3,895,384	85,739,100	11,618,544	11,120,214	2,547,262	34,512,620	62,925,136	73.4	22,813,964	9,547,568	8,862,594	5,875,478
Ann Arbor	Oct.	294	799,839	2,535	826,579	94,262	95,399	22,520	327,495	556,495	67.3	270,084	111,541	128,528	61,324
	10 mos.	294	7,607,038	16,936	7,832,808	849,795	969,099	231,837	3,335,336	5,564,747	71.0	2,268,061	792,953	1,174,762	364,907
Western Maryland	Oct.	837	3,857,890	7,410	4,029,203	507,241	721,694	74,747	1,130,021	2,568,963	63.8	1,460,240	895,000	809,848	110,055
	10 mos.	837	32,611,673	90,529	34,017,446	4,457,122	6,723,811	727,672	10,232,458	23,492,112	69.1	10,525,334	5,860,000	6,628,616	5,454,197
Western Pacific	Oct.	1,195	5,179,278	165,433	5,490,443	584,552	746,528	156,680	1,299,333	2,976,133	54.2	2,514,310	1,139,053	1,228,616	547,154
	10 mos.	1,195	36,553,769	2,213,306	39,667,432	5,359,449	5,845,050	1,440,634	11,445,014	25,873,337	65.2	13,794,095	5,897,196	7,165,598	3,236,267
Wisconsin Central	Oct.	1,051	2,632,762	28,567	3,047,744	363,764	373,915	59,677	977,614	1,866,250	61.2	1,181,494	345,500	678,514	47,480
	10 mos.	1,051	22,768,798	370,823	24,731,196	3,546,767	3,445,681	591,722	9,213,097	17,672,398	71.5	7,058,798	2,427,768	3,104,321	1,849,958

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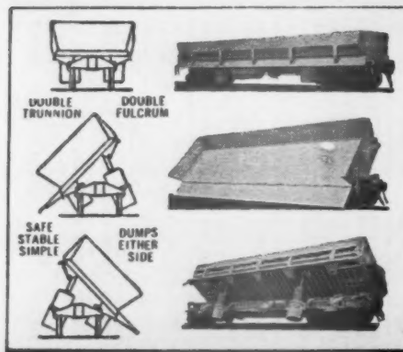

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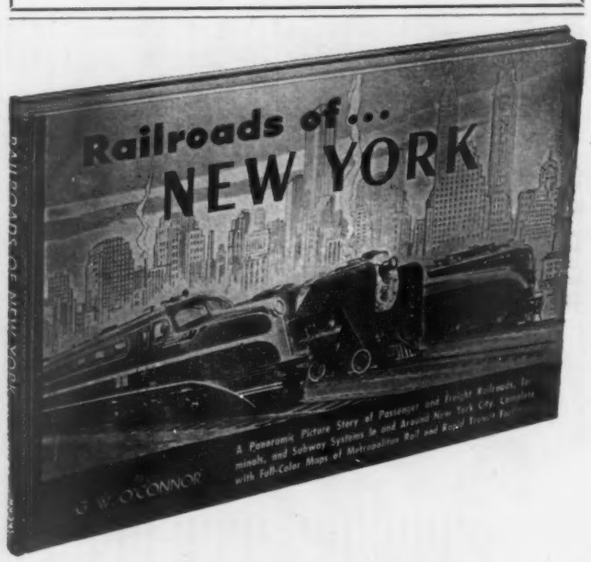

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Advertisers

IN THIS ISSUE

Allied Chemical & Dye Corporation, The Barrett Division... 23
American Brake Shoe Company, National Bearing Division ... 28
American Locomotive Company, Railway Steel-Spring Division 30
American Steel Foundries 63
Automatic Electric Sales Corporation 16

Baldwin Locomotive Works, The Front Cover
Barco Manufacturing Co. 26
Barrett Division, The, Allied Chemical & Dye Corporation. 23
Bethlehem Steel Company 3
Bowser, Inc. 25

Caterpillar Tractor Co. 81
Clark Equipment Company..... 77
Classified Department 87
Continental Foundry & Machine Co. 74

Differential Steel Car Co. 86
Dixie Cup Company 65
Dyer Co., Inc., W. H. 87

Edgewater Steel Company 17
Electro-Motive Division, General Motors Corporation 70, 71

Gardner-Denver Company 24
General Railway Signal Company .....Back Cover
General Steel Castings 59
Georgia-Pacific Plywood & Lumber Co. 20
Gold Car Heating & Lighting Co. 86
Gould-National Batteries, Inc. .. 19
Great Lakes Steel Corporation.. 18

Harrison Radiator Division of General Motors Corporation.. 22
Hunt Company, Robert W. 87
Hyster Company 83

Iron & Steel Products, Inc. ... 87

Lima-Hamilton Corporation ... 67

Miner, Inc., W. H. 11
Mississippi Valley Equipment Co. 87
Mortell Co., J. W. 74

National Malleable and Steel Castings Company 78, 79
National Pneumatic Co., Inc. .. 29
National Steel Corporation 18
New York Air Brake Company, The 69

Ohio Locomotive Crane Co., The 86
Ohio Steel Foundry Co., The .. 86
Okonite Company, The 86

Pullman-Standard Car Manufacturing Company 14, 15
Purdy Company, The 86

Railway Educational Bureau, The 87
Railway Steel-Spring Division, American Locomotive Company 30
Republic Steel Corporation 10
Ryerson & Son, Inc., Joseph T. 88

Scullin Steel Co. 21
Signode Steel Strapping Co. ... 72
Socony-Vacuum Oil Co., Inc. .. 27
Standard Railway Equipment Manufacturing Company 9
Symington - Gould Corporation, The 89

Texas Company, The 2

Union Asbestos & Rubber Company 60
Union Switch & Signal Company 6
United States Steel Export Company 12, 13

Westinghouse Air Brake Co. .. 4
Westinghouse Electric Corporation .....Front Cover
Weyerhaeuser Sales Company.. 8
Willson Products, Inc. 76

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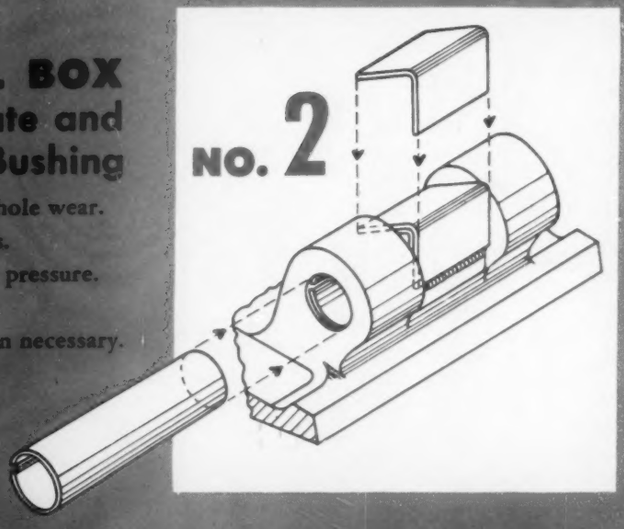

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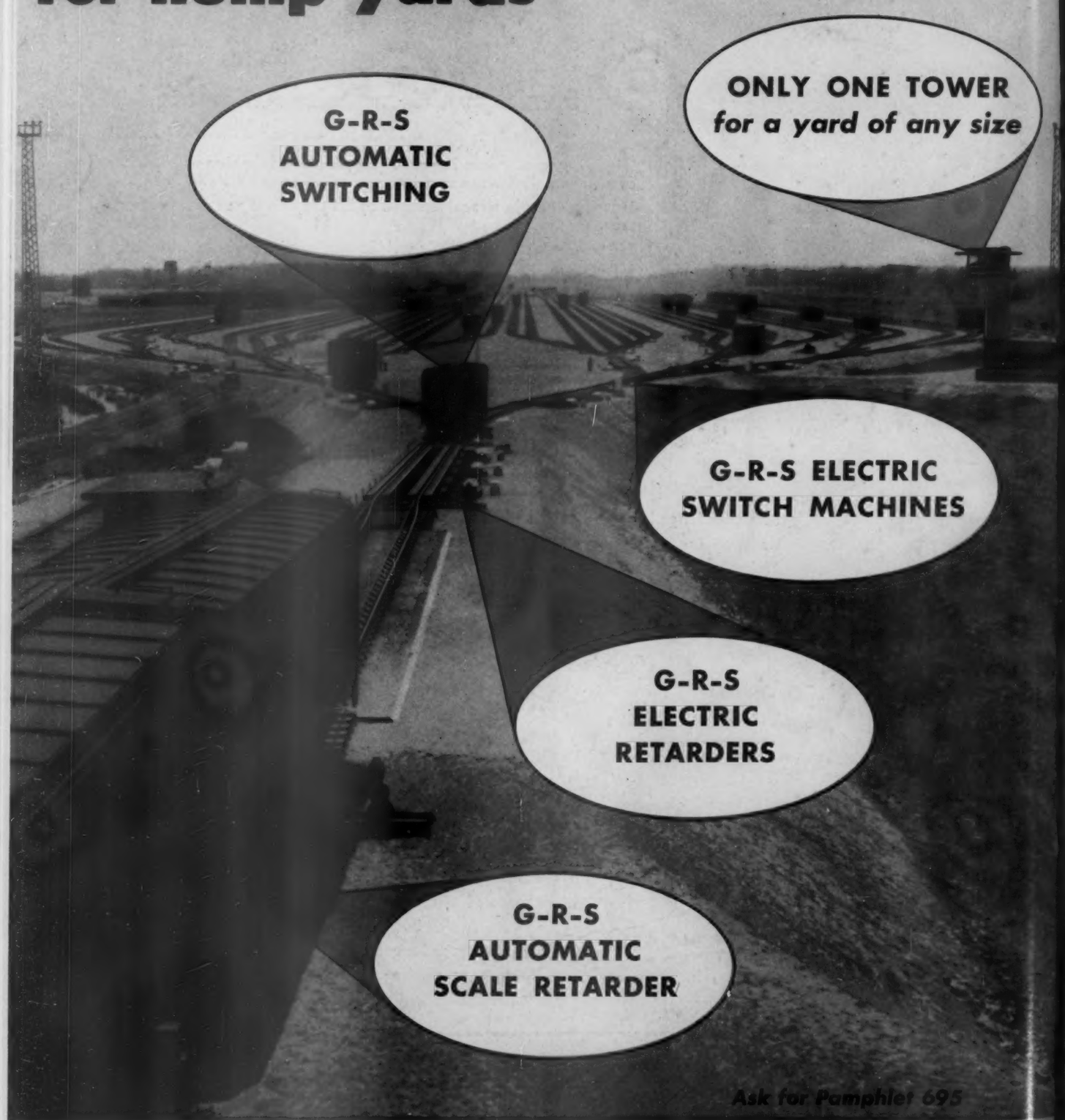
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